ORDER NO. AD9002032C2

# Service Manual

Digital Integrated Amplifier

Amplifier

# SU-X901

**Color**

(K) .... Black Type

**Area**

| Country Code | Area | Color |
|---|---|---|
| (E) | Continental Europe | (K) |
| (EB) | Great Britain | (K) |
| (EG) | F.R. Germany & Italy | (K) |

## SPECIFICATIONS

**(DIN 45 500)**

### ■ AMPLIFIER SECTION

| | |
|---|---|
| **DIN power output** | |
| **1 kHz THD: 1 %** | 2 × 100 W (8 Ω) |
| **Total harmonic distortion** | |
| **rated power at 1 kHz** | 1 % (8 Ω) |
| **Harmonic distortion** | |
| **half power at 1 kHz** | 0.007 % (8 Ω) |
| **Residual hum and noise** | 0.2 mV |
| **Damping factor** | 30 (8 Ω) |
| **Input sensitivity and impedance** | |
| **PHONO** | 3 mV/47 kΩ |
| **TUNER, AUX, TAPE 1, TAPE 2** | 150 mV/22 kΩ |
| **CD** | 200 mV/22 kΩ |
| **Maximum input voltage (1 kHz, RMS)** | |
| **PHONO** | 100 mV |
| **S/N (rated power 8 Ω)** | |
| **PHONO** | 75 dB (IHF, A: 79 dB) |
| **TUNER, CD, AUX, TAPE 1, TAPE 2** | 82 dB (IHF, A: 83 dB) |
| **Frequency response** | |
| **PHONO** | RIAA standard curve ±0.8 dB (30 Hz~15 kHz) |
| **TUNER, CD, AUX, TAPE 1, TAPE 2** | 15 Hz~60 kHz (−3 dB) |
| **CD, DAT, AUX (digital section)** | 15 Hz~20 kHz (−0.5 dB) |
| **Tone controls** | |
| **BASS** | 50 Hz, +10 dB~−10 dB |
| **TREBLE** | 20 kHz, +10 dB~−10 dB |
| **Muting** | −20 dB |
| **Super bass** | 70 Hz, +10 dB |
| **Output voltage** | |
| **TAPE 1, TAPE 2, REC OUT** | 150 mV |
| **Channel balance, AUX 250 Hz~6,300 Hz** | ±1.0 dB |
| **Channel separation, (TUNER, 1 kHz) (A SPEAKER)** | 60 dB |
| **Headphones output level and impedance** | 660 mV/330 Ω |
| **Load impedance** | |
| **A or B, A and B** | 8 Ω~16 Ω |
| **SURROUND** | 8 Ω~16 Ω |

### ■ GENERAL

| | |
|---|---|
| **Power consumption** | 460 W |
| **Power supply** | |
| **For Great Britain** | AC 50 Hz/60 Hz, 240 V |
| **For others** | AC 50 Hz/60 Hz, 220 V |
| **Dimensions (W × H × D)** | 360 × 128 × 300 mm (14-3/16″ × 5-1/32″ × 11-13/16″) |
| **Weight** | 7.9 kg (17.4 lb.) |

**Notes:**

1. Specifications are subject to change without notice.
2. Weight and dimensions are approximate.
3. Total harmonic distortion is measured by the digital spectrum analyzer.

Technics

**Matsushita Electric Industrial Co., Ltd.**
Central P.O. Box 288, Osaka 530-91, Japan

# ■ CONTENTS


| | Page |
|---|---|
| BEFORE REPAIR | 2 |
| PROTECTION CIRCUITRY | 2 |
| ACCESSORY | 2 |
| LOCATION OF CONTROLS | 3 |
| CONNECTIONS | 4~6 |
| DIGITALIZATION OF AUDIO SIGNALS | 7 |
| DISASSEMBLY INSTRUCTIONS | 8~11 |
| MEASUREMENTS AND ADJUSTMENTS | 12 |
| SCHEMATIC DIAGRAM | 13~22 |
| PRINTED CIRCUIT BOARDS | 23~26 |
| TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES | 27 |
| WIRING CONNECTION DIAGRAM | 27, 28 |
| BLOCK DIAGRAM | 28~30 |
| DESCRIPTION OF FL PANEL | 31 |
| FUNCTIONS OF IC TERMINALS | 31, 32 |
| REPLACEMENT PARTS LIST | 33~36, 39~41 |
| EXPLODED VIEW | 37, 38 |


## ■ BEFORE REPAIR

(1)Turn off the power supply. Using a 10Ω, 5W resistor connect both ends of power supply capacitors (C711, C712, 6800 μF) in order to discharge the voltage.

(2)Before turning the power supply on , after completion of repair , slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 220V/240V.

| Power supply voltage | AC220V | AC240V |
|---|---|---|
| Consumed current 50Hz | 200~500 mA | 180~450 mA |
| Consumed current 60Hz | 200~500 mA | 180~450 mA |

## ■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

* No sound is heard when the power is switched ON.

* Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted" , or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1.Switch OFF the power.

2.Determine the cause of the problem and correct it.

3.Switch ON the power once again.

**Note:**

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

## ■ ACCESSORY

• AC power supply cord.....1

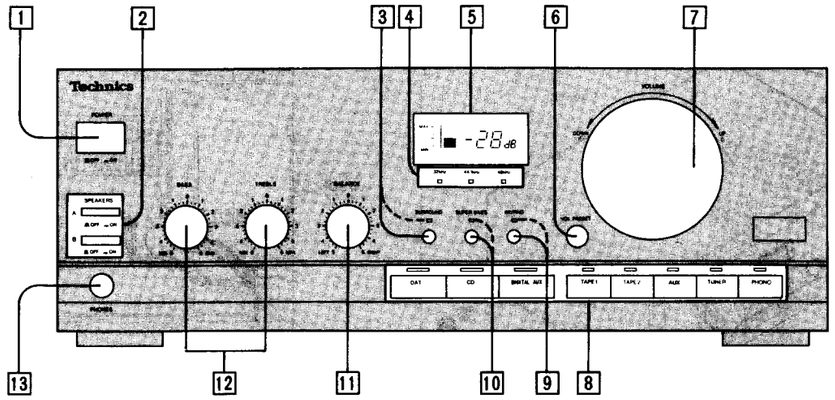
Configuration of AC power supply cord differs according to area.

SJA188 .....For (EB) area only.

SFDAC05E03 ....For others.

# ■ LOCATION OF CONTROLS

## •Front panel




**1 Power switch (POWER)**

**2 Speaker selector (SPEAKERS)**

**3 Surround-sound switch/indicator (SURROUND)**

**4 Sampling frequency indicators**
- **32 kHz:** For digital signals with the 32 kHz mode sampling frequency
- **44.1 kHz:** CD and others
- **48 kHz:** For digital signals with the 48 kHz mode sampling frequency

**5 Volume-level indicator**

**6 Volume preset button (VOL PRESET)**

**7 Volume control (VOLUME)**

**8 Input selectors/indicators**

**9 Audio muting switch/indicator (MUTING)**

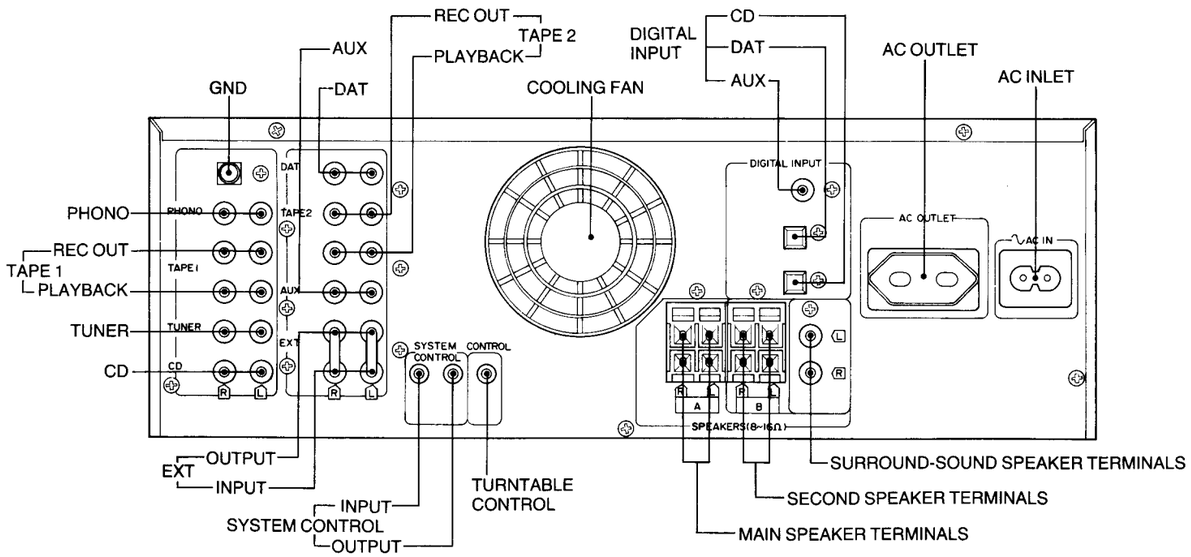
**10 Super bass switch/indicator (SUPER BASS)**

**11 Balance control (BALANCE)**

**12 Tone controls (BASS/TREBLE)**

**13 Headphones jack (PHONES)**

## •Rear panel

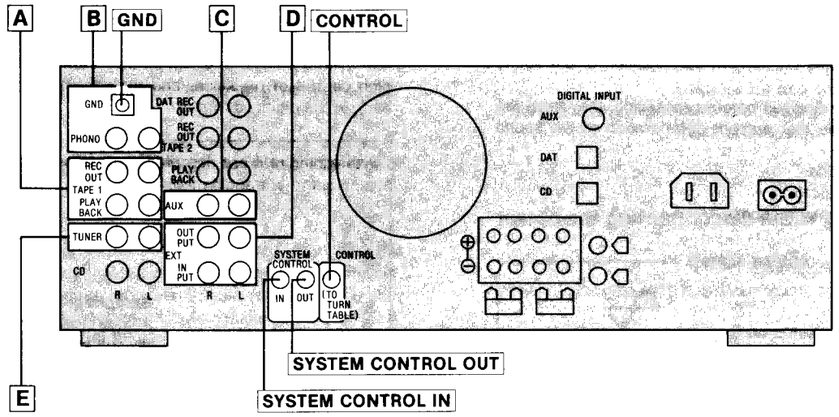



*Phono input capacitance is about 270 pF for EG area (about 100 pF for other areas).



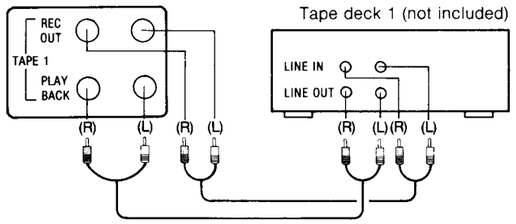
# ■ CONNECTIONS

Make connections to each component in the system by using stereo connection cables (not included).




## A "TAPE 1" terminals

Connect a first tape deck.

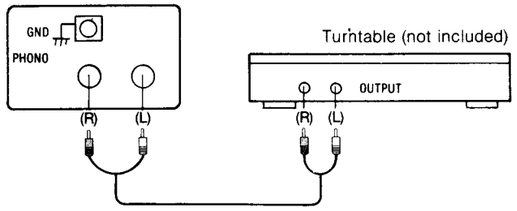



### ■ "SYSTEM CONTROL OUT" terminal

This terminal is used to connect a Technics tape deck with the control terminal.

## B "PHONO" terminals

Connect a turntable.




### ■ "GND" terminal

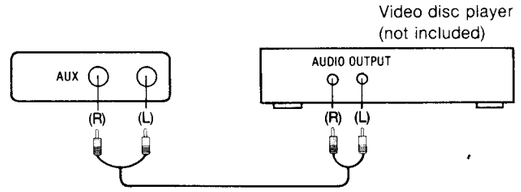
This terminal is for use with a turntable which has a ground wire.

### ■ "CONTROL" terminal

This terminal is used to connect a Technics turntable with the remote-control terminal.

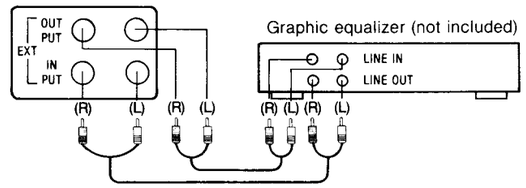
## C "AUX" terminals

Connect a video disc player (Only the audio is connectable), etc.

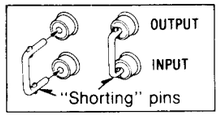



## D "EXT" terminals

Connect a graphic equalizer.

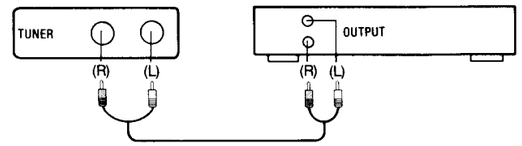



**Note:**
When these terminals are not in use, be sure to insert the "shorting" pins (included).




## E "TUNER" terminals

Connect a tuner.

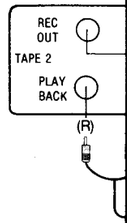



### ■ "SYSTEM CONTROL IN" terminal

This terminal is used to connect a Technics tuner with the control terminal.

## F "TA

Connect a vide
tape deck.




## G "DA

Connect a digi
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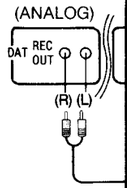


### ■ "DIGITA unit

These termina
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Remove the ca
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When these te
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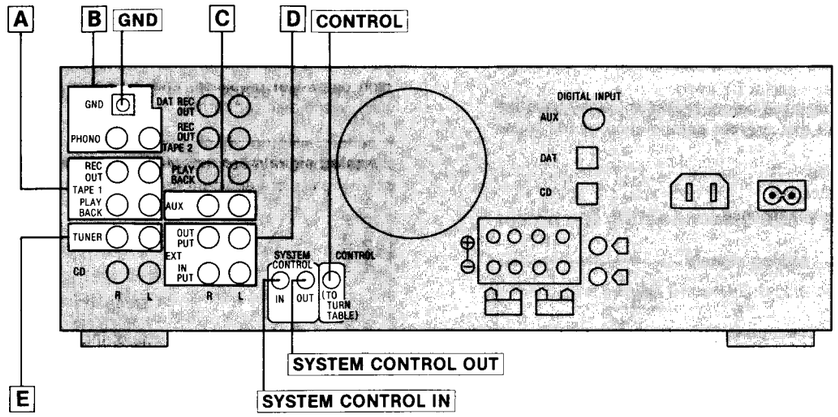
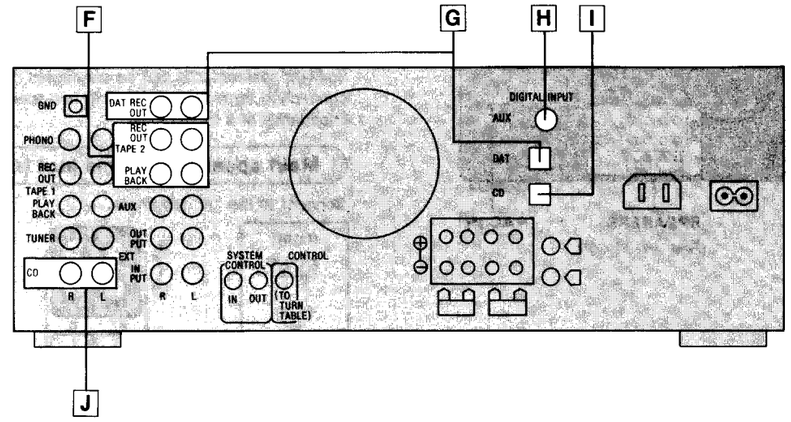
# ■ CONNECTIONS

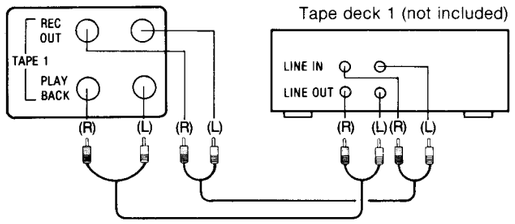
Make connections to each component in the system by using stereo connection cables (not included).




## A "TAPE 1" terminals

Connect a first tape deck.

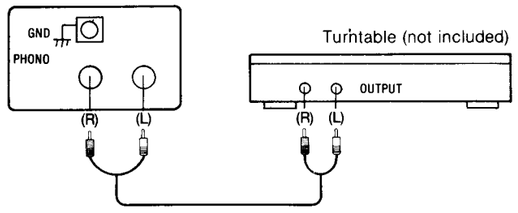



### ■ "SYSTEM CONTROL OUT" terminal

This terminal is used to connect a Technics tape deck with the control terminal.

## B "PHONO" terminals

Connect a turntable.




### ■ "GND" terminal

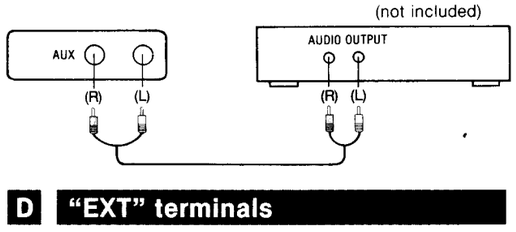
This terminal is for use with a turntable which has a ground wire.

### ■ "CONTROL" terminal

This terminal is used to connect a Technics turntable with the remote-control terminal.

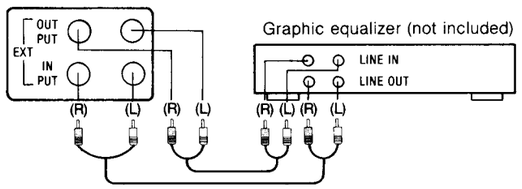
## C "AUX" terminals

Connect a video disc player (Only the audio is connectable), etc.

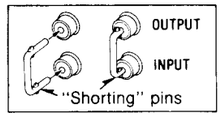



## D "EXT" terminals

Connect a graphic equalizer.

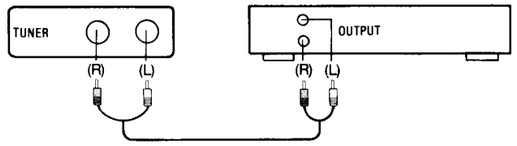



**Note:**
When these terminals are not in use, be sure to insert the "shorting" pins (included).




## E "TUNER" terminals

Connect a tuner.

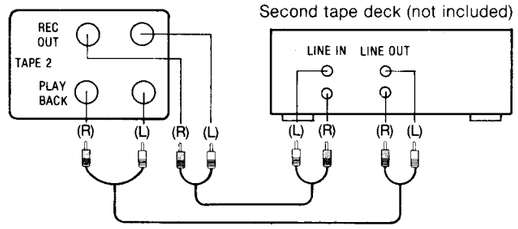



### ■ "SYSTEM CONTROL IN" terminal

This terminal is used to connect a Technics tuner with the control terminal.

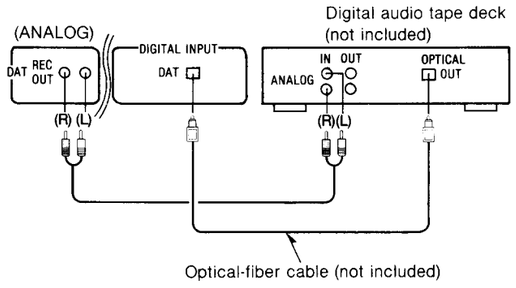
## F "TAPE 2" terminals

Connect a video cassette recorder (for audio only) or a second tape deck.



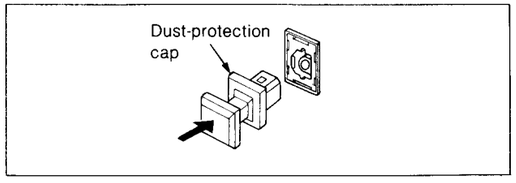

## G "DAT" terminals (DIGITAL)

Connect a digital audio tape deck.
Recordings can be made to the digital audio tape deck.



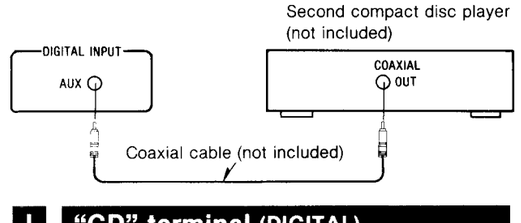

### ■ "DIGITAL INPUT" (DAT, CD) terminals of this unit

These terminals are protected by dust-protection caps to avoid damage by dust, etc.
Remove the caps only when the "DIGITAL INPUT" terminals are to be used.
When these terminals are not being used, attach the caps as shown in the illustration at the right.



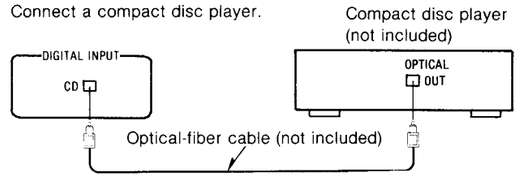

## H "AUX" terminal (DIGITAL)

Connect a second compact disc player, etc.



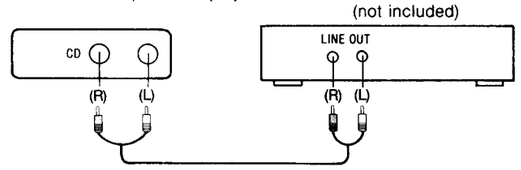

## I "CD" terminal (DIGITAL)

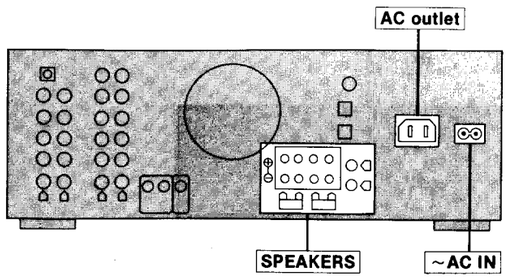
Connect a compact disc player.




## J "CD" terminals (ANALOG)

Connect a compact disc player.






(See text at right.)

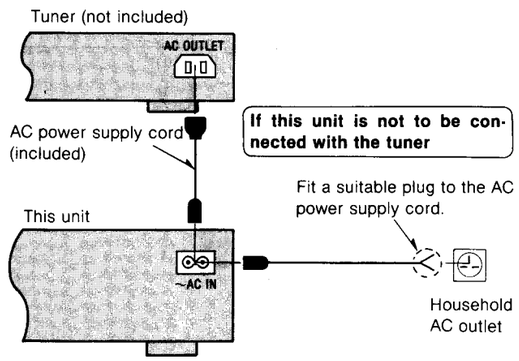
## AC outlet ("AC OUTLET")

Do not connect video equipment (such as a TV, etc.) to the AC outlet of this unit. (This outlet is intended for audio equipment.) Do not exceed the indicated power ratings when connecting to this outlet.

**"UNSWITCHED" outlet:**
Power is always available, regardless of power switch.
Audio equipment rated up to 60 W can be connected here.

## AC power supply cord

Connect the AC power supply cord (included) after all other cables and cords are connected.

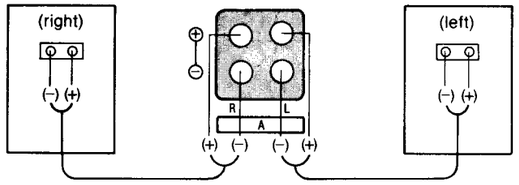

Tuner (not included)
AC OUTLET
AC power supply cord (included)
If this unit is not to be connected with the tuner
Fit a suitable plug to the AC power supply cord.
This unit
~AC IN
Household AC outlet

## Connection of speaker systems

Three pairs of speaker systems (main, second, surround-sound) can be connected to this unit.
Speaker systems that can be connected (to any of the speaker connection terminals of this unit) are speaker systems with an impedance of 8 to 16 ohms.

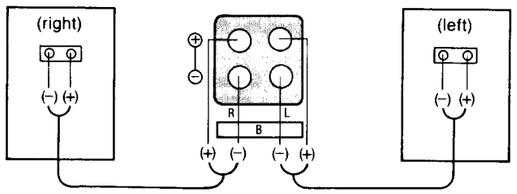
### Main speaker systems (not included)

Connect to the "A" terminals.




### Second speaker systems (not included)

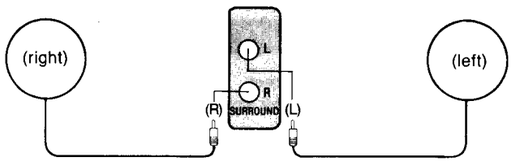
Connect to the "B" terminals.




### Surround-sound speaker systems (not included)

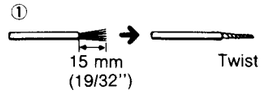
Connect to the "SURROUND" terminals.

- Be sure to connect both speaker systems. If only one side is connected, no sound will be heard.

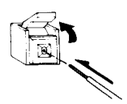



### To connect cords to terminals

① Strip off the outer covering, and twist the center conductor.



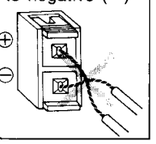

② Tilt the lever back and insert the cord.




③ Close the lever and pull the cord gently to be sure that it is secure.

**Note:**
Be sure to only connect positive (+) cords to positive (+) terminals, and negative (–) cords to negative (–) terminals.

**Note:**
To prevent damage to circuitry, never short-circuit the plus (+) and minus (–) speaker cords.



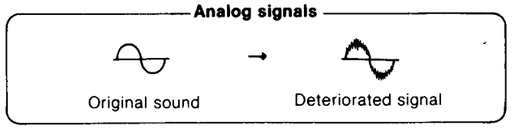





# ■ DIGITALIZATION OF AUDIO SIGNALS

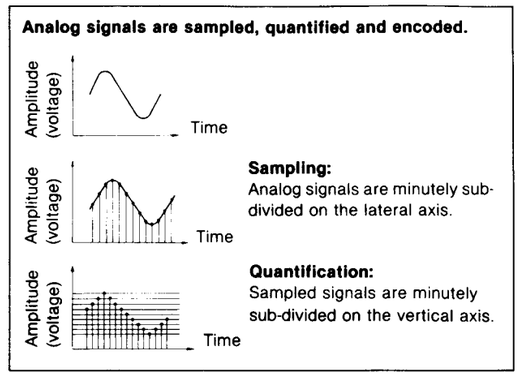
## ■ Why digitize?

- Audio signals are analog signals with a continuous form.
- When these audio signals are subjected to repeated electronic processing (recording, playback, etc.), they become noisy and distortion occurs, thus resulting in deterioration of the sound quality.
- If these signals are digitized before processing, they have the following advantages that prevent deterioration of the sound quality:
  ① Resistance to noise
  ② Extremely low distortion
  ③ Flat, even frequency response

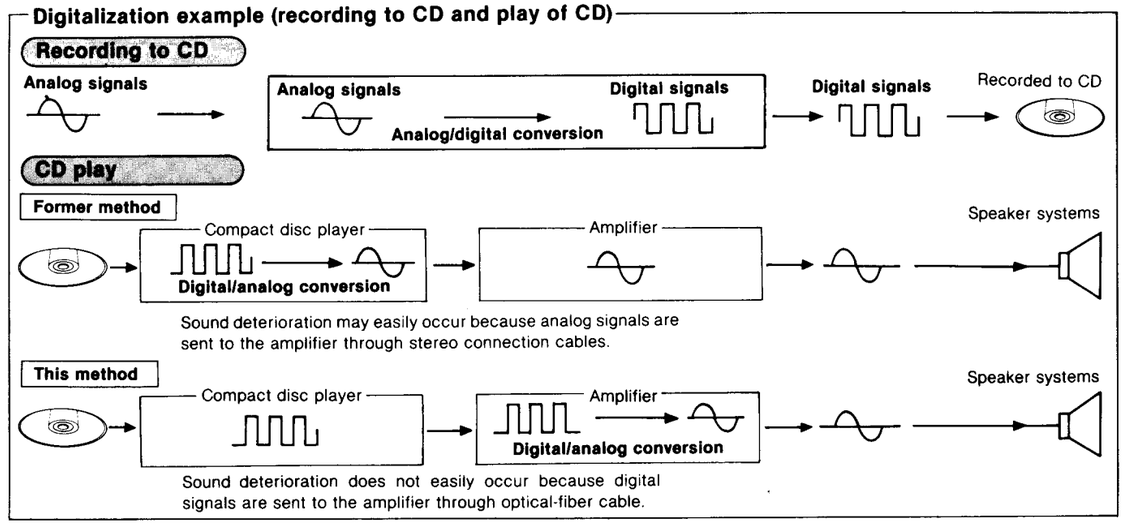



## ■ How signals are digitized

If it is known to what degree of minuteness the human ear can distinguish sounds, it is then possible, by using that data as the standard reference, to digitize signals by dividing analog signals into minute pieces, after which they can be transmitted with a high degree of precision, and thereafter recorded and played back in the digitized format.


Analog signals are sampled, quantified and encoded.
Amplitude (voltage)
Time
Sampling:
Analog signals are minutely sub-divided on the lateral axis.
Quantification:
Sampled signals are minutely sub-divided on the vertical axis.

### Digitalization example (recording to CD and play of CD)




### What the sampling frequencey is

The sampling frequency expresses the degree of minuteness to which signals can be sub-divided, relative to a certain specified time interval, during sampling.
For compact disc sound:
Analog signals are sub-divided 44,100 times (i.e., 44.1 kHz) during one second.
This 44.1 kHz is, therefore, the sampling frequency for compact disc sound.

### What analog/digital conversion is

Audio signals (analog signals) are taken out (sampled) at certain fixed time intervals. The points at which this sampling frequency occurs are digitally encoded and converted to digital signals.

### What digital/analog conversion is

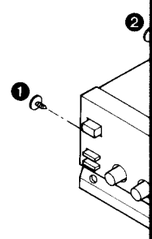
Each sampling frequency point is returned (converted) to voltage, thus converting digital signals to the analog signals that we can hear.





## ■ DISASS

| Ref. No. 1 |
|---|
| Procedure 1 |

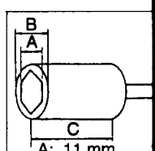



●Remove the

| Ref. No. 3 |
|---|
| Procedure 1→2→3 |

●Remove the 2

| Ref. No. 4 |
|---|
| Procedure 1→2→4 |



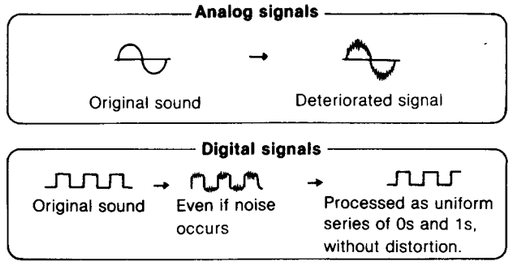

A: 11 mm
B: 16 mm
C: longer than 22 mm

●Use a wrench of dimensions show the illustration ab to remove nuts.

# ■ DIGITALIZATION OF AUDIO SIGNALS

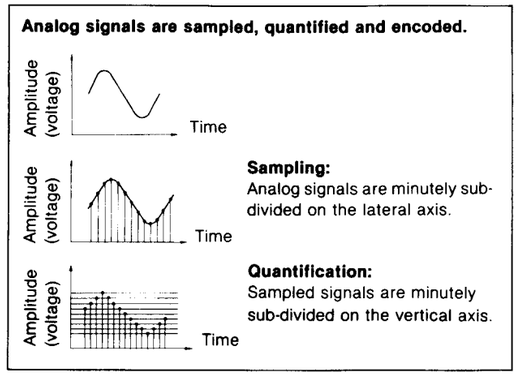
## ■ Why digitize?

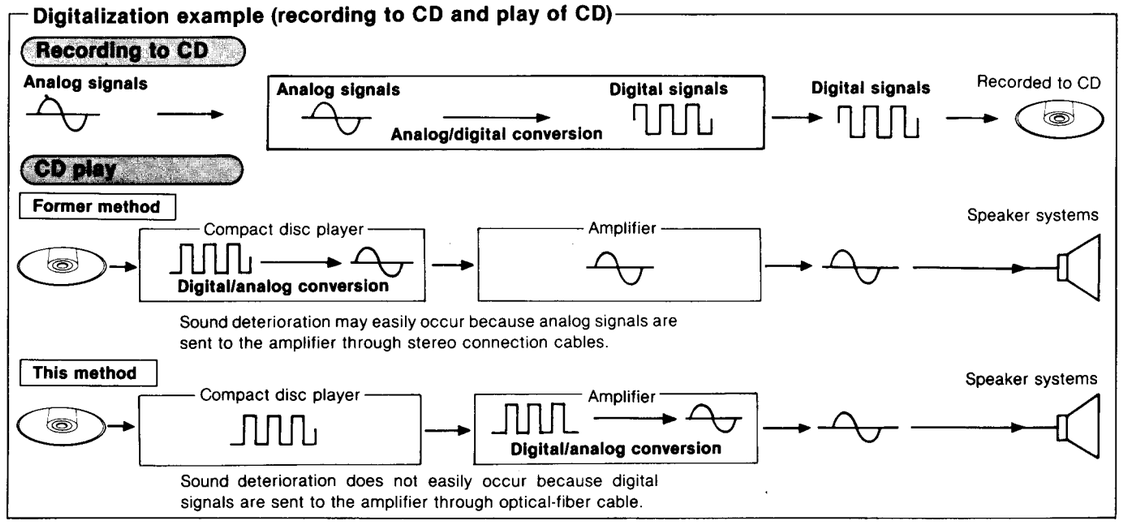
- Audio signals are analog signals with a continuous form.
- When these audio signals are subjected to repeated electronic processing (recording, playback, etc.), they become noisy and distortion occurs, thus resulting in deterioration of the sound quality.
- If these signals are digitized before processing, they have the following advantages that prevent deterioration of the sound quality:
  ① Resistance to noise
  ② Extremely low distortion
  ③ Flat, even frequency response




## ■ How signals are digitized

If it is known to what degree of minuteness the human ear can distinguish sounds, it is then possible, by using that data as the standard reference, to digitize signals by dividing analog signals into minute pieces, after which they can be transmitted with a high degree of precision, and thereafter recorded and played back in the digitized format.


Analog signals are sampled, quantified and encoded.
Amplitude (voltage)
Time
Sampling:
Analog signals are minutely sub-divided on the lateral axis.
Quantification:
Sampled signals are minutely sub-divided on the vertical axis.




## What the sampling frequencey is

The sampling frequency expresses the degree of minuteness to which signals can be sub-divided, relative to a certain specified time interval, during sampling.
For compact disc sound:
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## What analog/digital conversion is

Audio signals (analog signals) are taken out (sampled) at certain fixed time intervals. The points at which this sampling frequency occurs are digitally encoded and converted to digital signals.

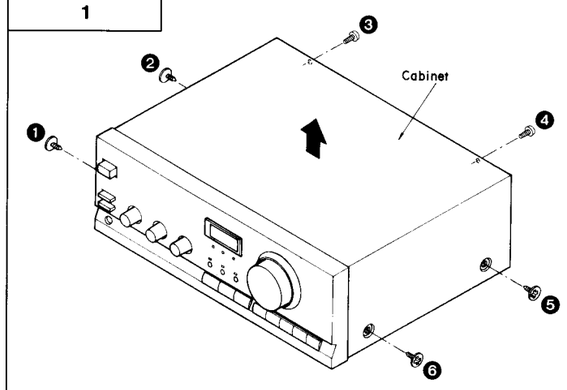
## What digital/analog conversion is

Each sampling frequency point is returned (converted) to voltage, thus converting digital signals to the analog signals that we can hear.



# ■ DISASSEMBLY INSTRUCTIONS

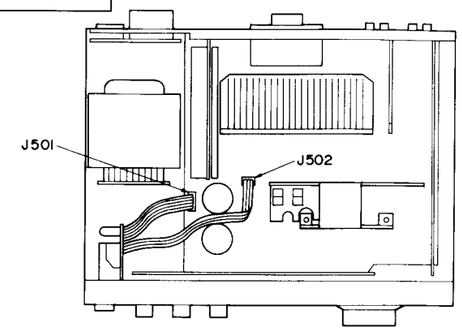
| Ref. No. 1 | Removal of the Cabinet |
|---|---|
| Procedure 1 | |



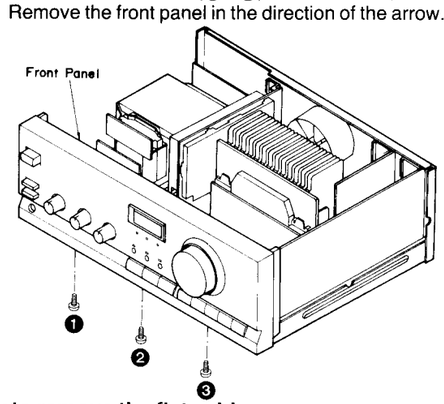

●Remove the 6 screws (❶~❻).

| Ref. No. 2 | Removal of the Front Panel |
|---|---|
| Procedure 1→2 | |

1. Remove the flat cables (J501, J502).

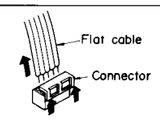



2. Remove the 3 screws (❶~❸).
3. Remove the front panel in the direction of the arrow.

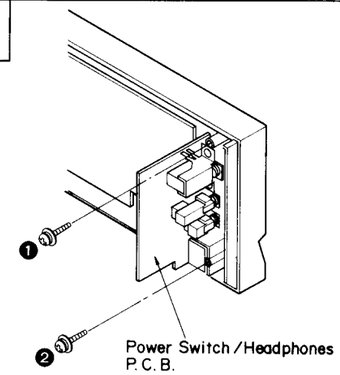



### How to remove the flat cable

1. Lift the connector.
2. Pull out the flat cable.

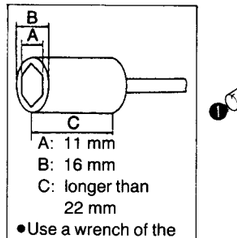



| Ref. No. 3 | Removal of the Power Switch/ Headphones P.C.B. |
|---|---|
| Procedure 1→2→3 | |



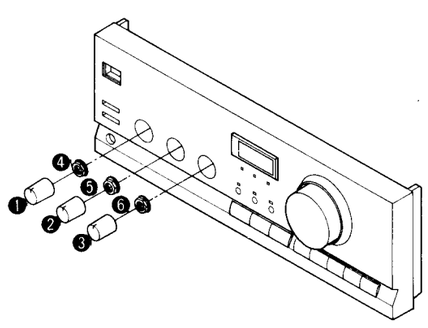

●Remove the 2 screws (❶, ❷).

| Ref. No. 4 | Removal of the FL Drive P.C.B. |
|---|---|
| Procedure 1→2→4 | |

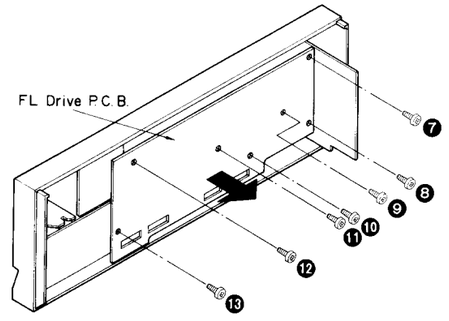



A: 11 mm
B: 16 mm
C: longer than 22 mm

●Use a wrench of the dimensions shown in the illustration above to remove nuts.



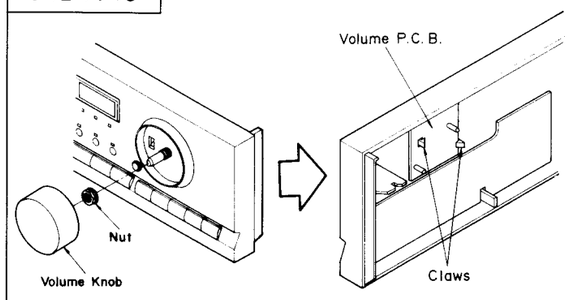

1. Pull out the 3 knobs (❶~❸).
2. Remove the 3 nuts (❹~❻).




3. Remove the 7 screws (❼~⓭).

## Ref. No. 5 — Removal of the Volume P.C.B.

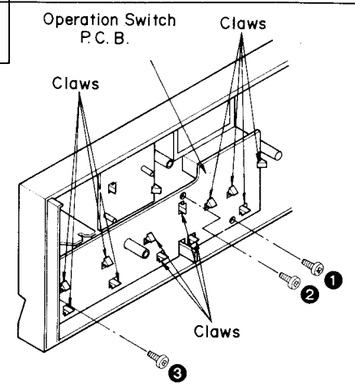
**Procedure** 1→2→4→5




1. Pull out the volume knob.
2. Remove the 1 nut.
3. Release the 2 claws.

## Ref. No. 6 — Removal of the Operation Switch P.C.B.

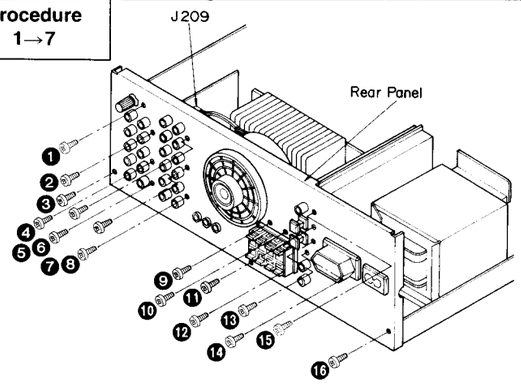
**Procedure** 1→2→4→6




1. Remove the 3 screws (❶~❸).
2. Release the 12 claws.

## Ref. No. 7 — Removal of the Rear Panel

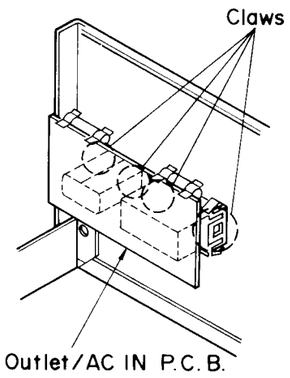
**Procedure** 1→7




1. Remove the 1 connector (J209).
2. Remove the 16 screws (❶~⓰).

## Ref. No. 8 — Removal of the AC OUTLET/ AC IN P.C.B.

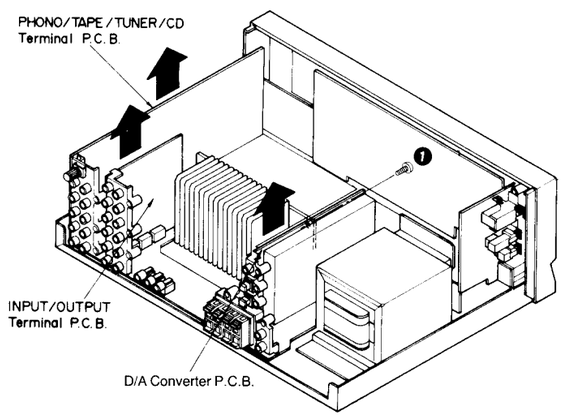
**Procedure** 1→7→8




●Release the 4 claws.

## Ref. No. 9 — Removal of the D/A Converter P.C.B., PHONO/TAPE/TUNER/CD Terminal P.C.B. and INPUT/ OUTPUT Terminal P.C.B.

**Procedure** 1→7→9




### ■ Removal of the D/A Converter P.C.B.

1. Remove the 1 screw (❶).
2. Remove the D/A Converter P.C.B. in the direction of the arrow.

### ■ Removal of the PHONO/TAPE/TUNER/CD Terminal P.C.B.

●Remove the PHONO/TAPE/TUNER/CD Terminal P.C.B. in the direction of the arrow.

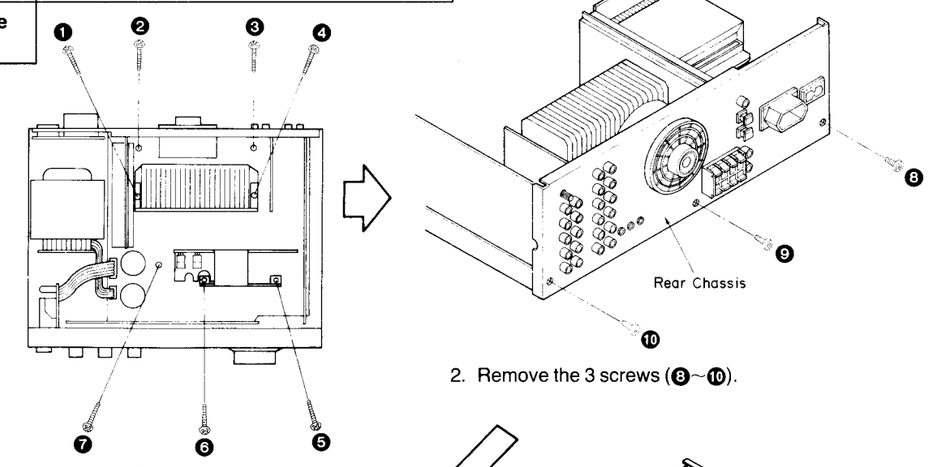
### ■ Removal of the INPUT/OUTPUT Terminal P.C.B.

●Remove the INPUT/OUTPUT Terminal P.C.B. in the direction of the arrow.

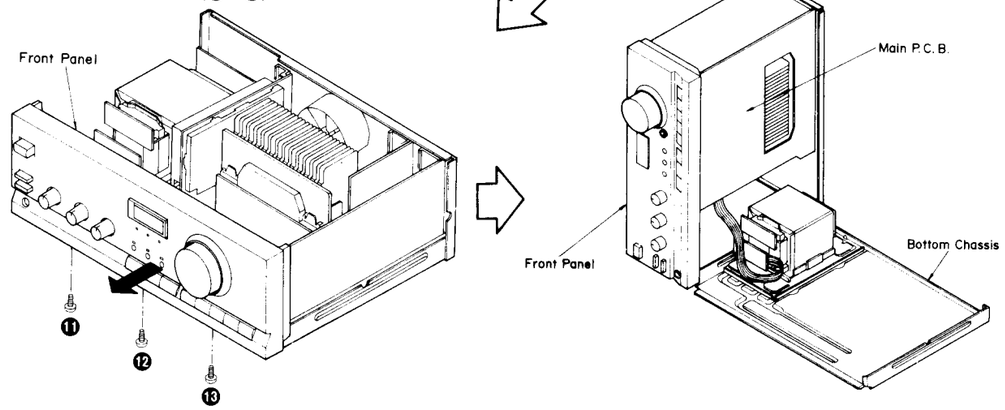


## Ref. No. 10 — Check of the main P.C.B.

**Procedure** 1→10




1. Remove the 7 screws (❶~❼).
2. Remove the 3 screws (❽~❿).

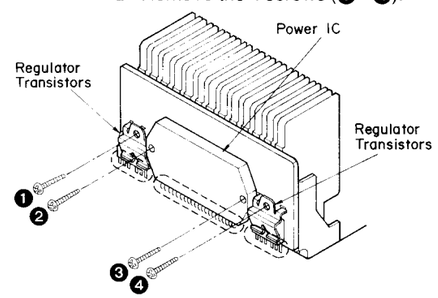



3. Remove the 3 screws (⓫~⓭).
4. Remove the front panel in the direction of the arrow.
   ※Connect 2 flat cables (J501, J502).
5. Remove the bottom chassis.
6. Reinstall the front panel to the main P.C.B.

## Ref. No. 11 — Removal of the Power IC and Regulator Transistor

**Procedure** 1→10→11

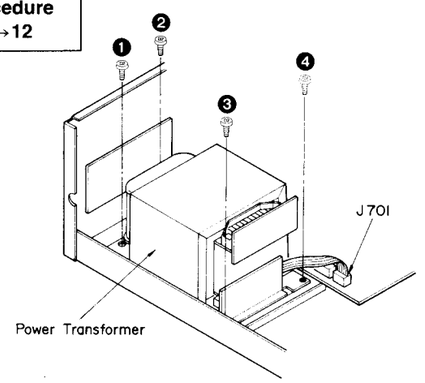
1. Unsolder the power IC or regulator transistor.
2. Remove the 4 screws (❶~❹).




**Note:** When mounting the power IC, or regulator transistor apply silicon terminal compound (SZZ0L15) to the rear of the power IC or regulator transistor.

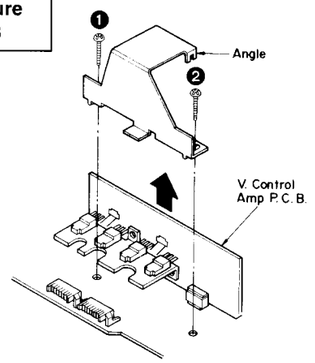
## Ref. No. 12 — Removal of the Power Transformer

**Procedure** 1→12

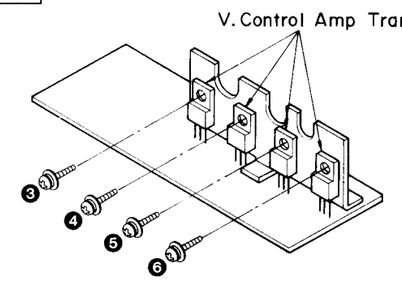



1. Remove the 1 flat cable (J701).
2. Remove the 4 screws (❶~❹).

| Ref. No. 13 | Removal of the V. Control Amp P.C.B. and V. Control Amp Transistor |
|---|---|
| Procedure 1→13 | |




1. Remove the 2 screws (❶, ❷).
2. Remove the V. Control Amp P.C.B. in the direction of the arrow.

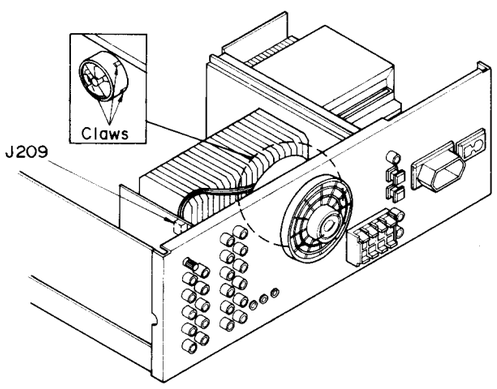


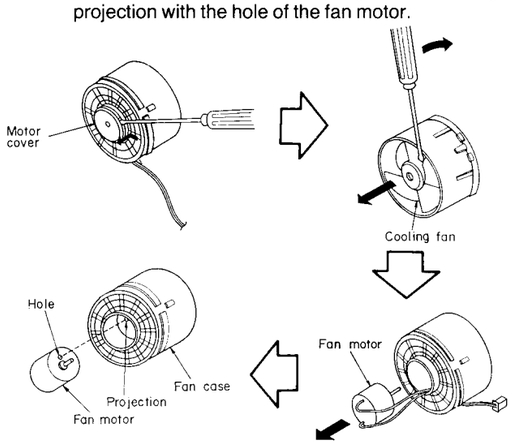

3. Unsolder the V. Control Amp transistor.
4. Remove the 4 screws (❸~❻).

**Note:** When mounting the transistor, apply silicon terminal compound (SZZ0L15) to the rear of the transistor.

| Ref. No. 14 | Removal of the Fan Motor |
|---|---|
| Procedure 1→14 | |

1. Remove the 1 connector (J209).
2. Release the 3 claws.
4. Insert a screwdriver at the root of the cooling fan. Force it out of the motor shaft.
5. Remove the motor cover by used ⊖ screwdriver.
6. Remove the motor from the fan casing.
7. When mounting the motor fan, align the fan casing's projection with the hole of the fan motor.

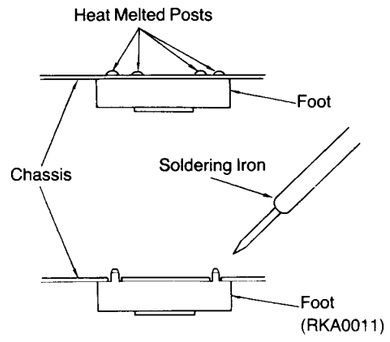



**"ATTENTION SERVICER"**
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

## ●Replacement of the Foot.

1. Remove the 4 heat melted posts on the chassis with a pair of nippers or similar tool.
2. To replace the foot (RKA0011) on the chassis, melt the 4 posts with a soldering iron.



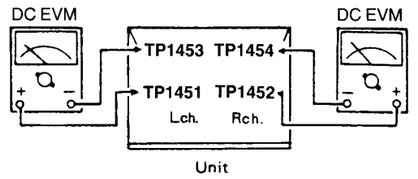


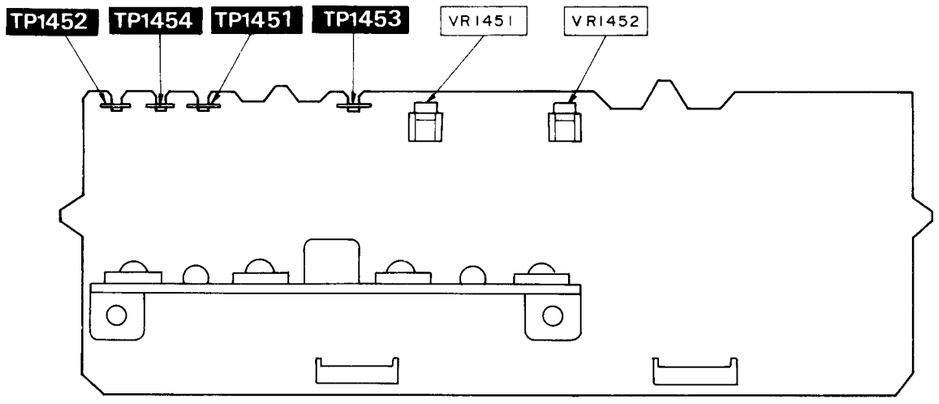

# ■ MEASUREMENTS AND ADJUSTMENTS

**Control positions and equipment used.**
- Volume knob . . . . . ∞ (Minimum)
- Speaker selector (A) . . . . . off
- Speaker selector (B) . . . . . off
- DC electronic voltmeter (EVM) . . . . . 2

**VOLTAGE CONTROL(V)AMP. IDLING (ICQ) ADJUSTMENT**

1. Test equipment connection is shown in figure. (Connect the DC EVM on both channels.)
2. Completely turn the (V) amp. Adjusting volumes **(VR1451, VR1452)** counter-clockwise.
3. Turn ON the set when it is cold, and 15 sec. later, adjust **VR1451** and **VR1452** so that the voltage is **40 mV**.
   Also, check that the voltage is **30~65 mV** (standard: **35 mV**) after lapse of **10–15 minutes**. (Below **35 mV** after lapse of **60 min.)**



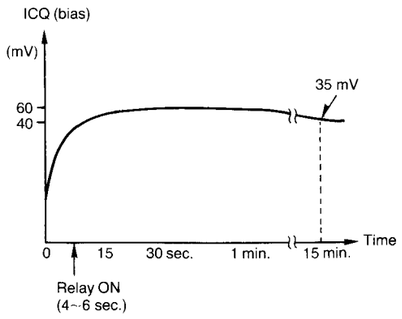




## ●Test point

**TP1451**...L ch ⊕ Voltage control amp $I_{CQ}$ adj.
**TP1453**...L ch ⊖ Voltage control amp $I_{CQ}$ adj.
**TP1452**...R ch ⊕ Voltage control amp $I_{CQ}$ adj.
**TP1454**...R ch ⊖ Voltage control amp $I_{CQ}$ adj.

## ●Adjustment VR

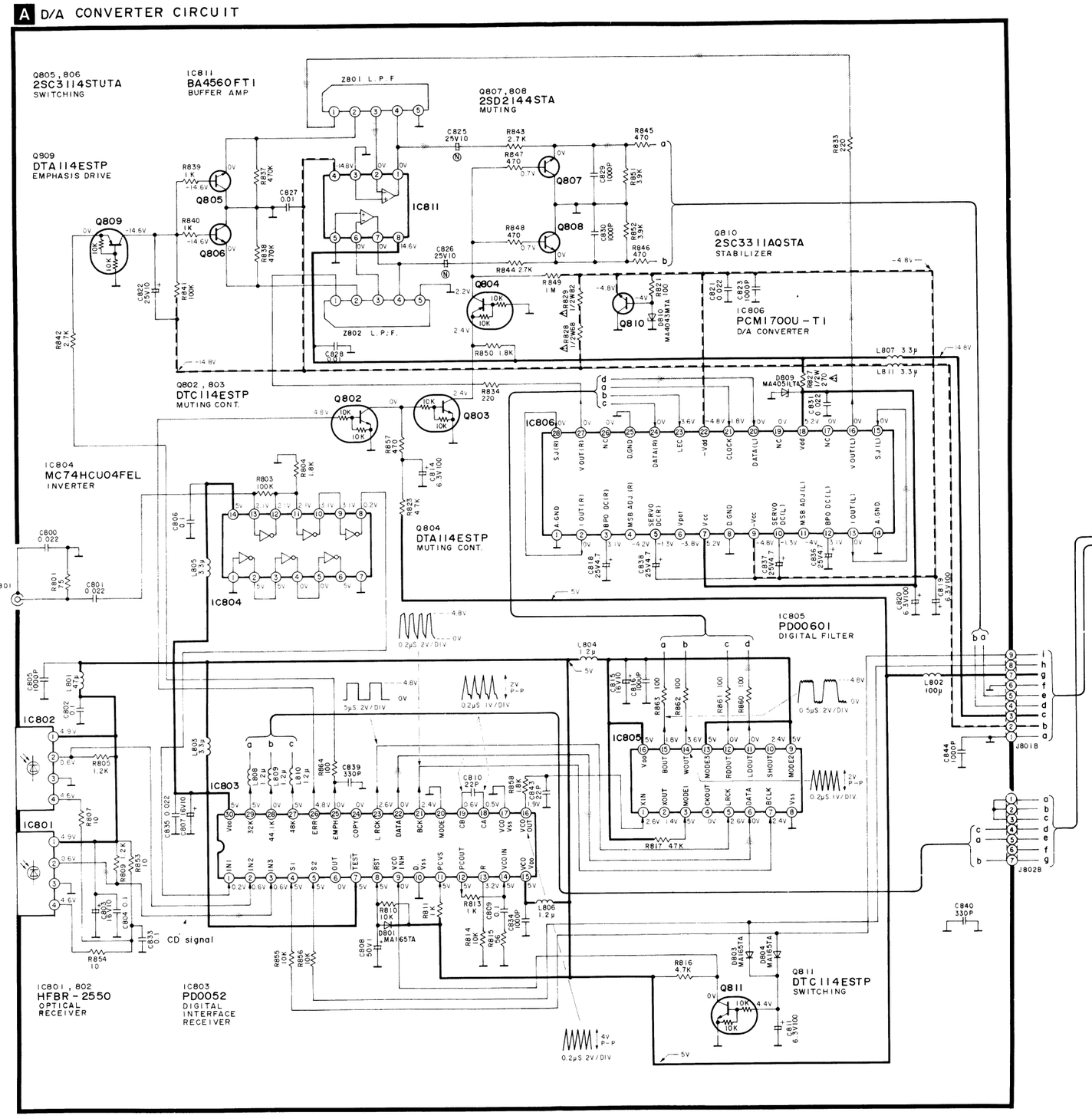
**VR1451**...L ch Voltage control amp $I_{CQ}$ adj.
**VR1452**...R ch Voltage control amp $I_{CQ}$ adj.



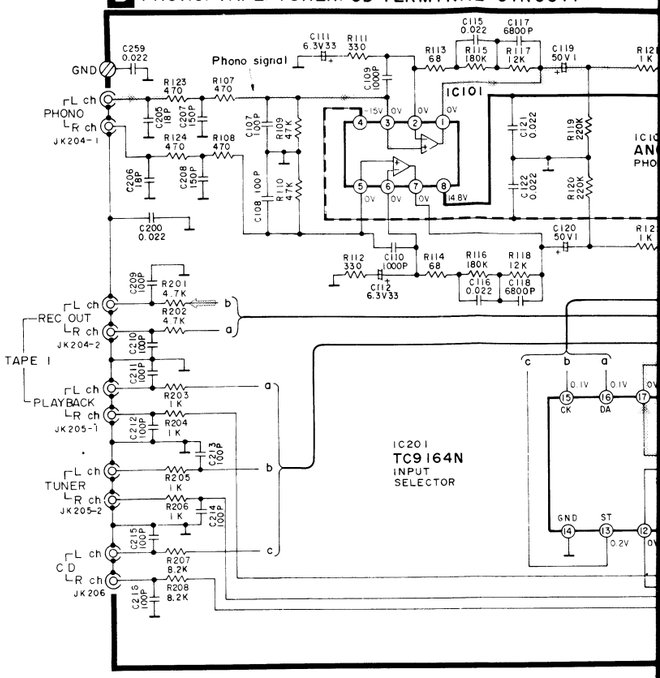
# ■ SCHEMATIC DIAGRAM

(Parts list on pages 33~35, 39~41)

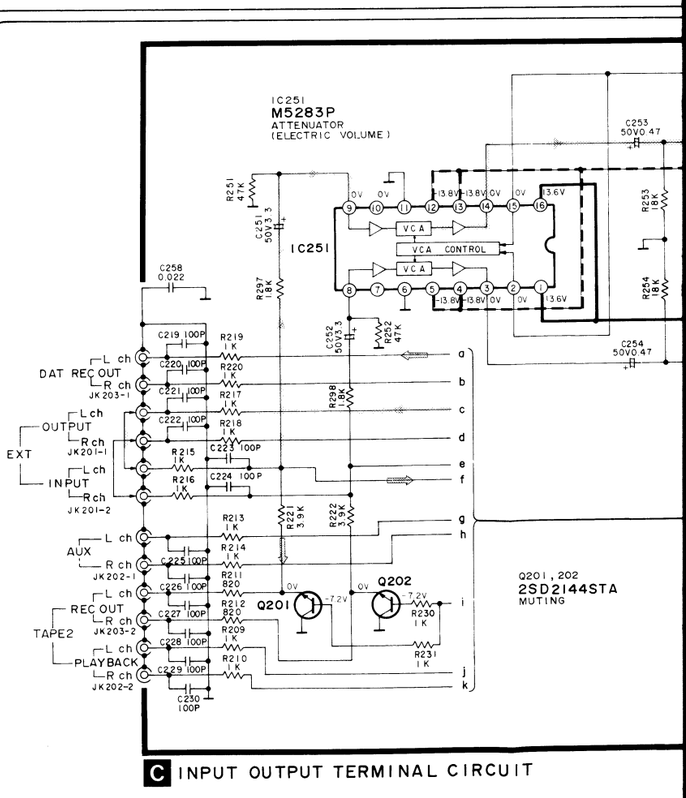
## A D/A CONVERTER CIRCUIT




## B PHONO/TAPE/TUNER/CD TERMINAL CIRCUIT




## C INPUT OUTPUT TERMINAL CIRCUIT



CD TERMINAL CIRCUIT

IC101
AN6558SFE2
PHONO EQ AMP

IC201
TC9164N
INPUT SELECTOR

IC301
AN6558SFE2
PHASE SHIFT

IC303
BA4560FTI
BUFFER AMP

IC302
AN6554NSFE2
MIXING/ PHASE SHIFT

Phase differense signal

Q301
2SD2144STA
SWITCHING (SURROUND)

Q303
DTA114ESTP
SWITCHING CONT. (SURROUND)

Q403
DTA114ESTP
SWITCHING CONT. (SUPER BASS)

Q401, 402
2SD2144STA
SWITCHING (SUPER BASS)

IC402
AN6554NSFE2
PRE/B.P.F.AMP

Super bass signal

Q206
2SA1309AQSTA
REGULATOR

IC252
AN6558SFE2
BUFFER AMP

Q205
2SC3311AQSTA
REGULATOR

Q201, 202
2SD2144STA
MUTING

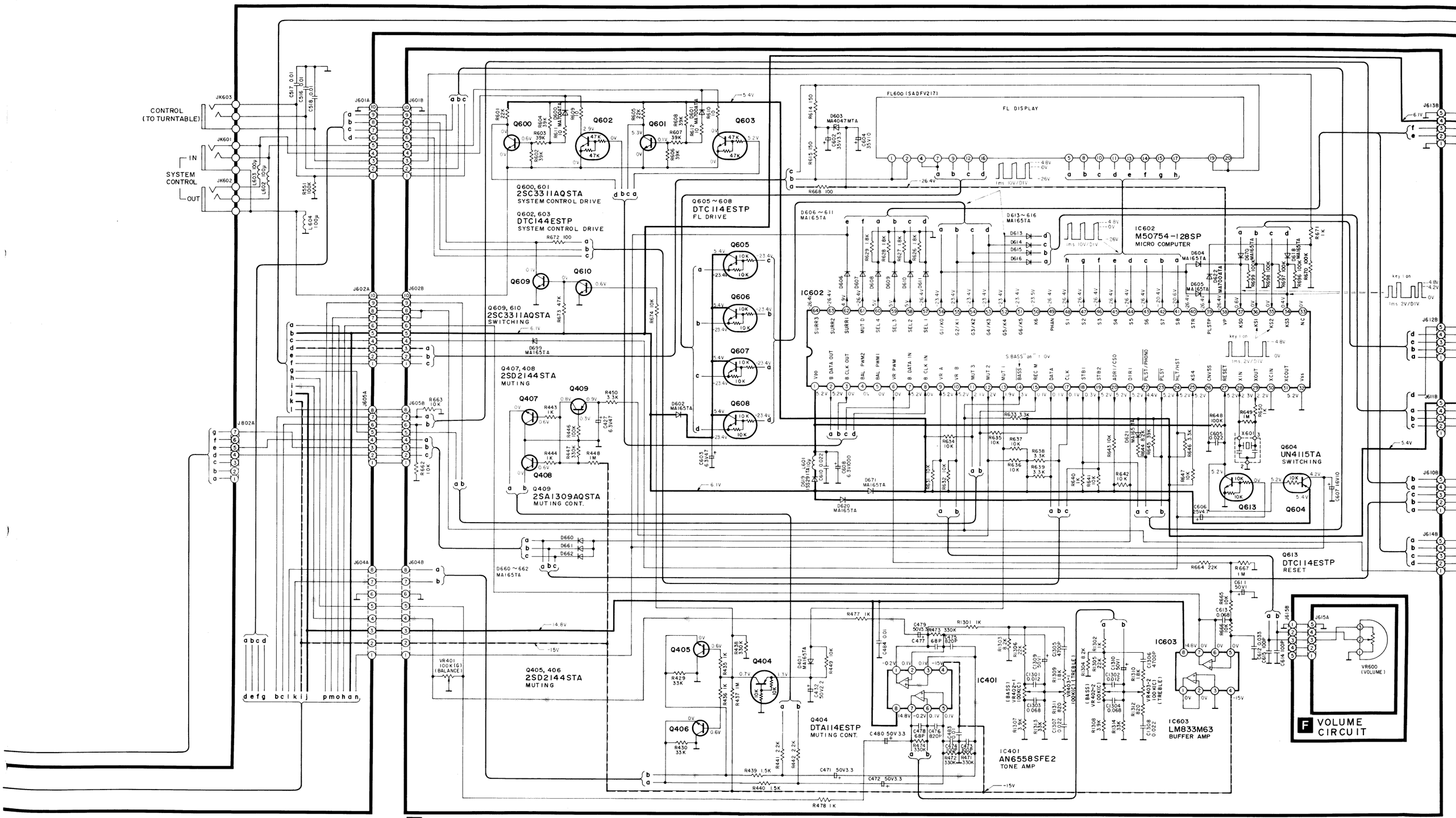
Q203
DTA114ESTP
MUTING CONT.

MOTOR

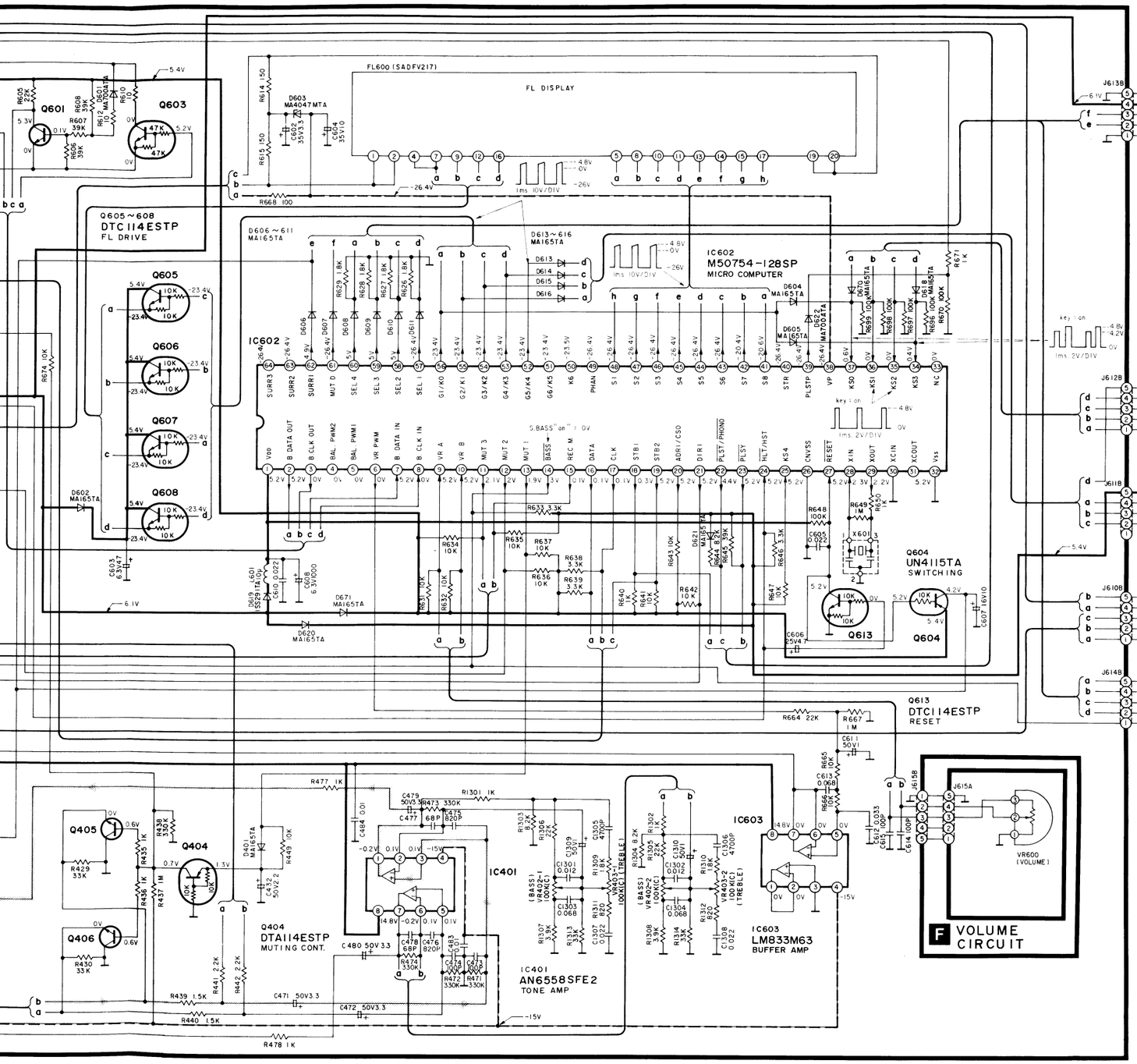
VCA
VCA CONTROL
VCA

NAL CIRCUIT

D MAIN CIRCUIT


CONTROL (TO TURNTABLE)
JK603
JK601
IN
SYSTEM CONTROL
JK602
OUT
Q600, 601
2SC3311AQSTA
SYSTEM CONTROL DRIVE
Q602, 603
DTC144ESTP
SYSTEM CONTROL DRIVE
Q605~608
DTC114ESTP
FL DRIVE
Q609, 610
2SC3311AQSTA
SWITCHING
Q407, 408
2SD2144STA
MUTING
Q409
2SA1309AQSTA
MUTING CONT.
Q405, 406
2SD2144STA
MUTING
Q404
DTA114ESTP
MUTING CONT.
FL600 (SADFV217)
FL DISPLAY
IC602
M50754-128SP
MICRO COMPUTER
Q604
UN4115TA
SWITCHING
Q613
DTC114ESTP
RESET
IC603
LM833M63
BUFFER AMP
IC401
AN6558SFE2
TONE AMP
VR600 (VOLUME)
VR401 100K (G) (BALANCE)
F VOLUME CIRCUIT
E FL DRIVE CIRCUIT

25 26 27 28 29 30 31 32 33 34 35



H V. CONTROL AMP CIRCUIT

I POWER SWITCH/HE

IC1401 AN7062N VOLTAGE AMP.

Q1401,1402 2SA1123RSTTA PRE DRIVE

Q1453,1454 2SC3311AQSTA LIMITER

Q1457,1458 2SC2631RSTTA AA CLASS AMP

Q1459,1460 2SC1123RSTTA AA CLASS AMP

Q1461,1462 2SC3944AQRS AA CLASS AMP

Voltage control amp. ICQ adj. (L ch)

Q1465,1466 2SC1567QRS ICQ ADJ.

Q1455,1456 2SA1309AQSTA LIMITER

Q1463,1464 2SA1535AQRS AA CLASS AMP

Voltage control amp. ICQ adj. (R ch)

Q1451,1452 2SC2631RSTTA CURRENT STABILIZER

Voltage control amp. ICQ adj. test point (L ch)

Voltage control amp. ICQ adj. test point(Rch)

IC501 SV13205 POWER AMP

Q510 2SA992EFPTA RELAY DRIVE

Q505 2SA1309AQSTA MOTOR DRIVE

Q503 2SA1309AQSTA MUTING CONT.

Q501,502 2SD1450RSTTA MUTING

Q504 2SC2458ABCTA MOTOR DRIVE

Q705 2SD1761DEF REGULATOR

Q703,706 2SD1761DEF REGULATOR

Q701 UN4215TA STABILIZER

Q704 2SB1187DEF REGULATOR

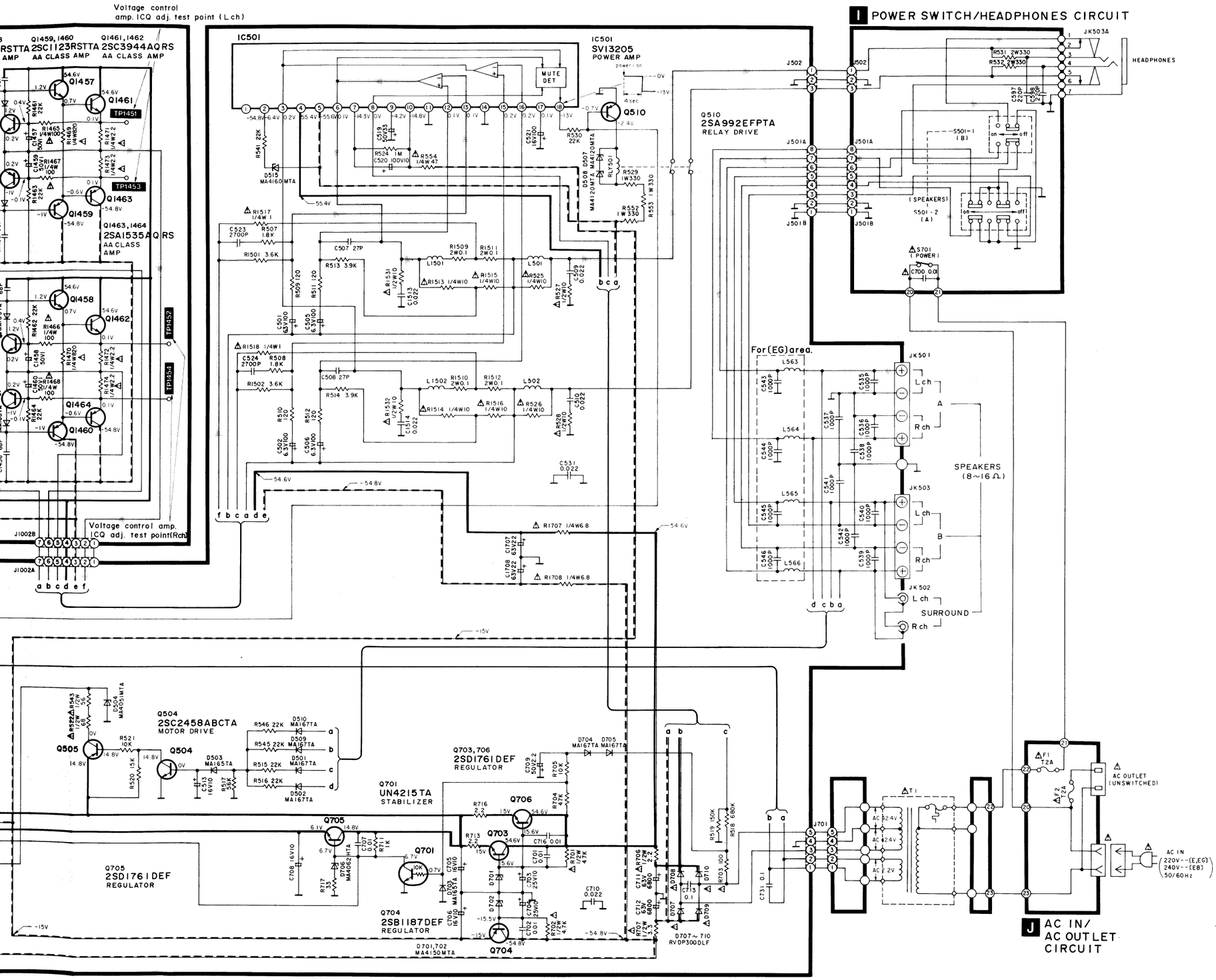
Q702 2SB621AQRSTA REGULATOR

For(EG)area.

SPEAKER (8~16Ω)

SURROUND

40 41 42 43 44 45 46 47 48 49 50




**Notes:**

- **S501-1** : Speaker B selector switch in **"OFF"** position.
- **S501-2** : Speaker A selector switch in **"ON"** position.
- **S600** : Surround-sound switch in **"OFF"** position.
- **S601** : Super bass switch in **"OFF"** position.
- **S602** : Audio muting switch in **"OFF"** position.
- **S603** : Volume preset switch in **"OFF"** position.
- **S604~S611** : Input selector switches.
  **S604: DAT, S605: CD, S606: DIGITAL AUX**
  **S607: TAPE1, S608: TAPE 2, S609: AUX**
  **S610: TUNER, S611: PHONO**
- **S701** : Power switch in **"ON"** position.

CD signal (Lch), Phono signal (Lch)
Positive voltage lines (+)
Negative voltage lines (−)
Super bass signal
Phase difference signal
Recording signal

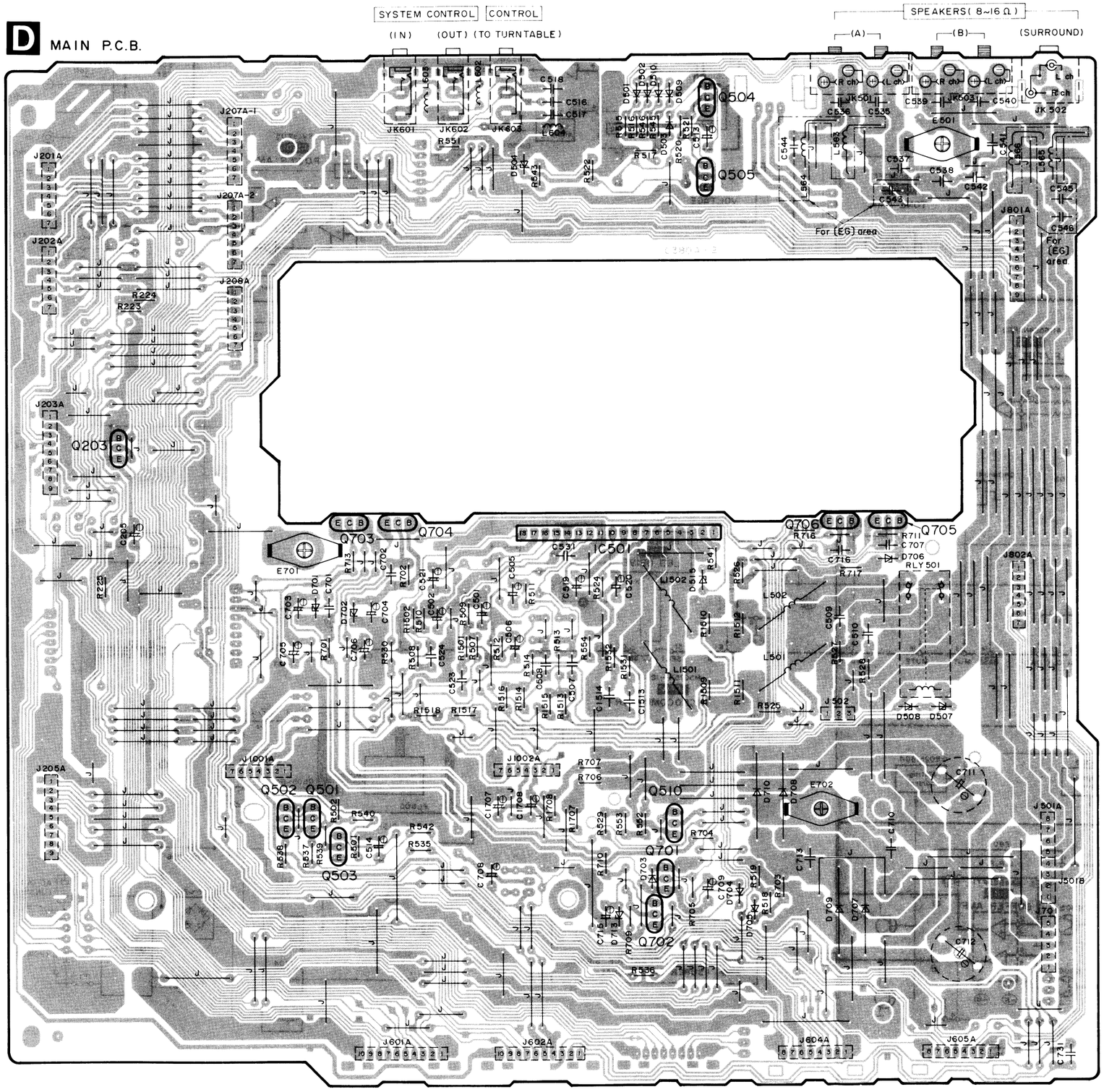
- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

***Caution!**

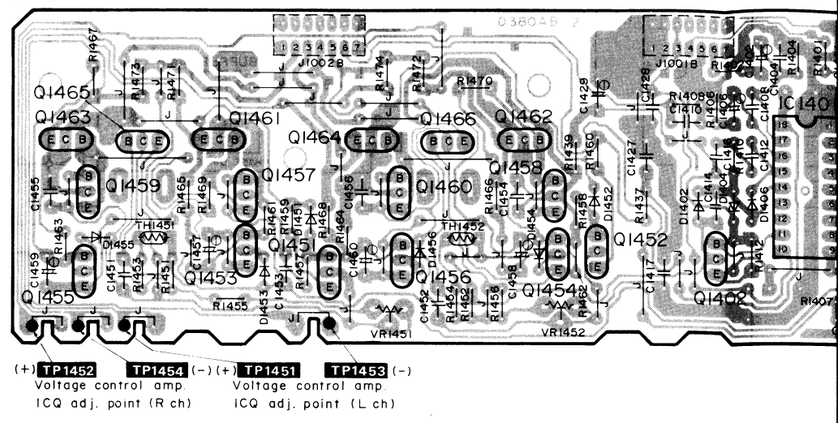
IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care furing repair.
*Cover the parts boxes made of plastics with aluminum foil.
*Ground the soldering iron.
*Put a conductive mat on the work table.
*Do not touch the legs of IC or LSI with the fingers directly.

# ■ PRINTED CIRCUIT BOARDS (Parts list on pages 33~35, 39~41)

## D MAIN P.C.B.




## H V. CONTROL AMP P.C.B.

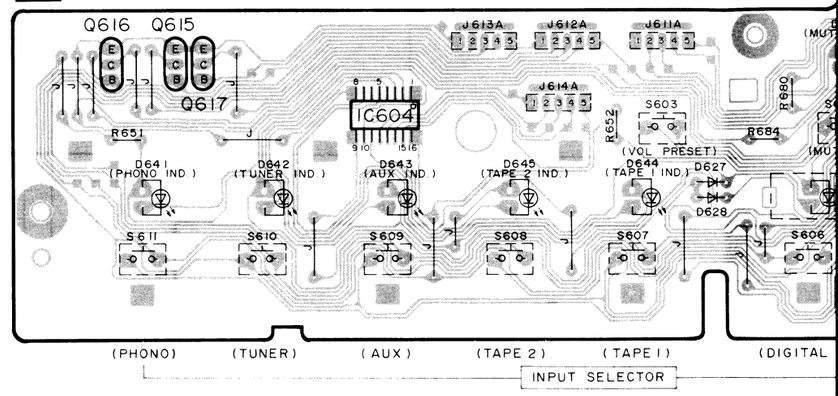



(+) TP1452 TP1454 (-) (+) TP1451 TP1453 (-)

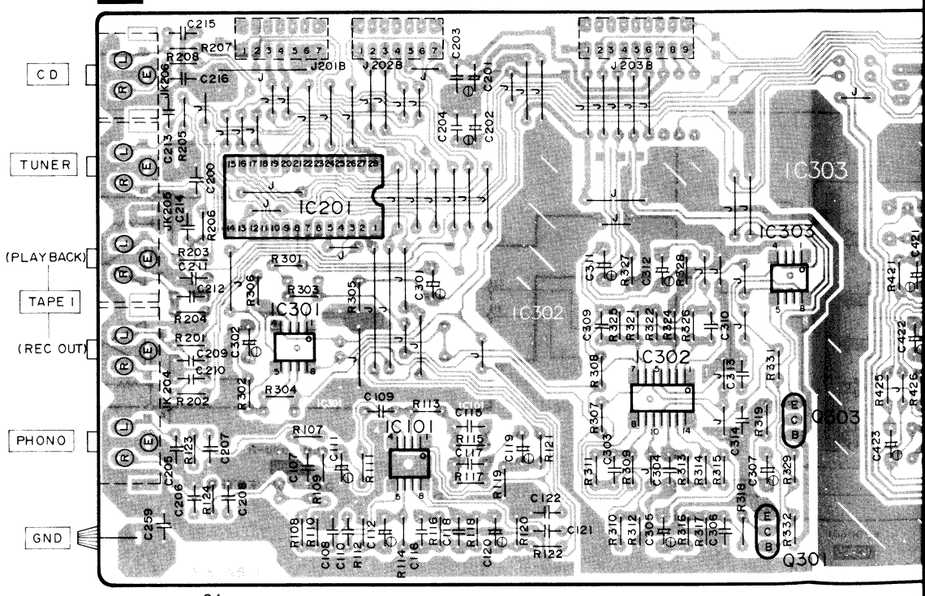
Voltage control amp. ICQ adj. point (R ch)

Voltage control amp. ICQ adj. point (L ch)

## G OPERATION SWITCH P.C.B.

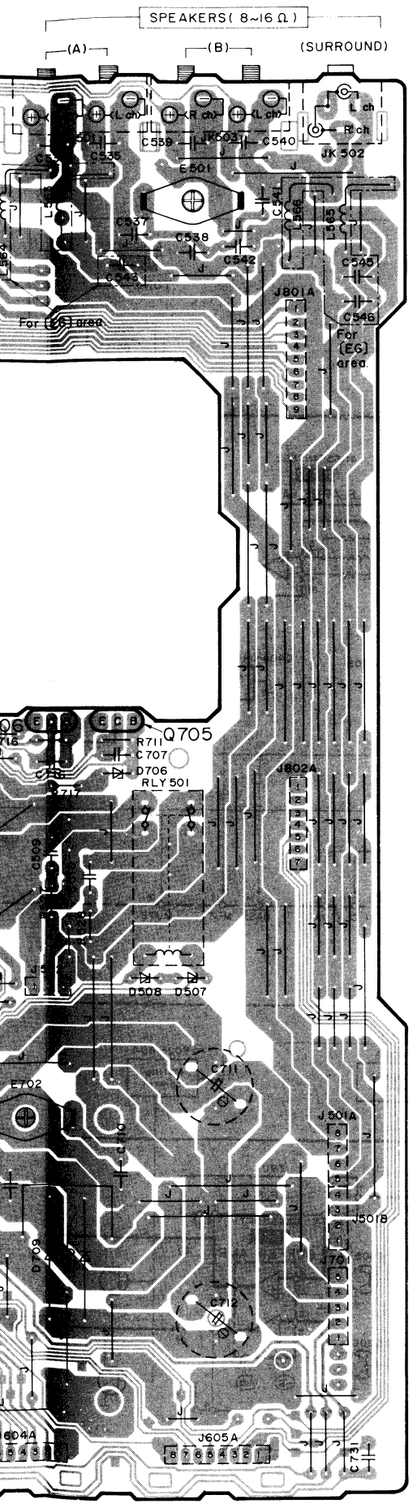



## B PHONO / TAPE / TUNER / CD TERMINAL P.C.B.

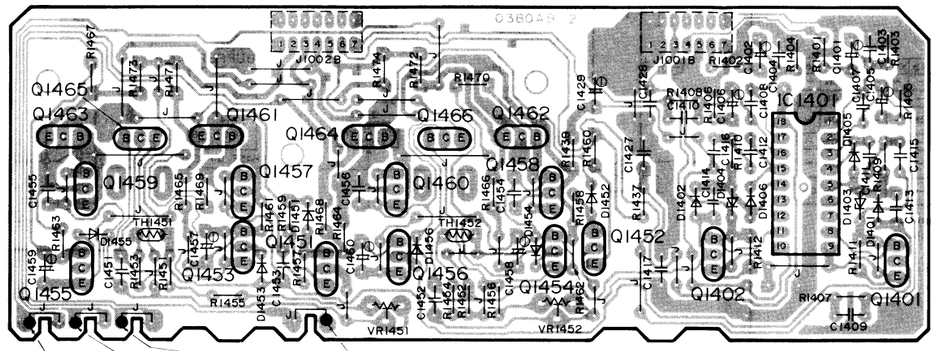


SPEAKERS( 8~16 Ω )

(A) (B) (SURROUND)




## H V. CONTROL AMP P.C.B.

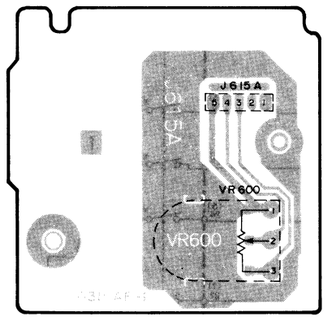



(+) TP1452 TP1454 (-) (+) TP1451 TP1453 (-)

Voltage control amp. ICQ adj. point (R ch)

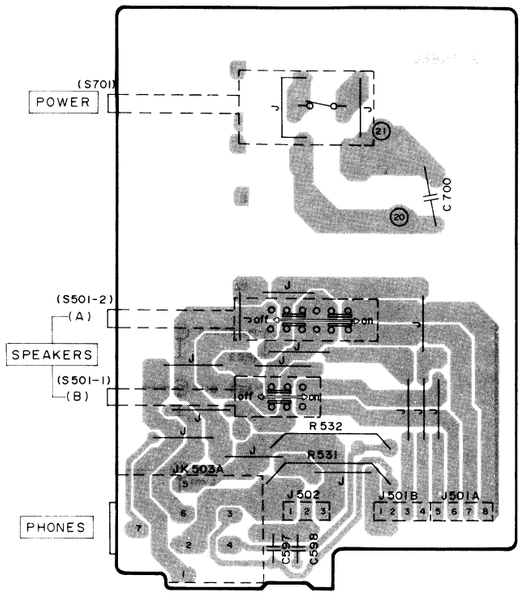
Voltage control amp. ICQ adj. point (L ch)

## F VOLUME P.C.B.

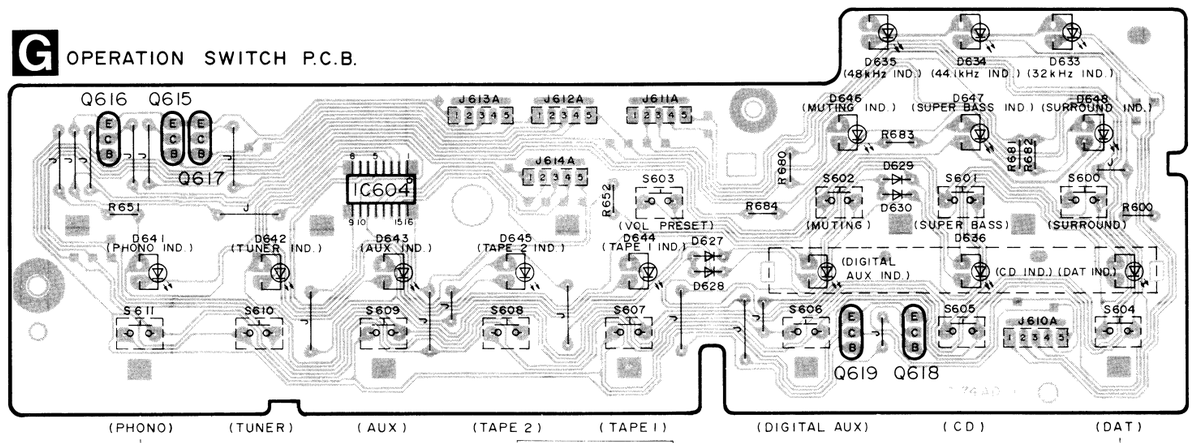



VOLUME

## I POWER SWITCH/HEADPHONES P.C.B.



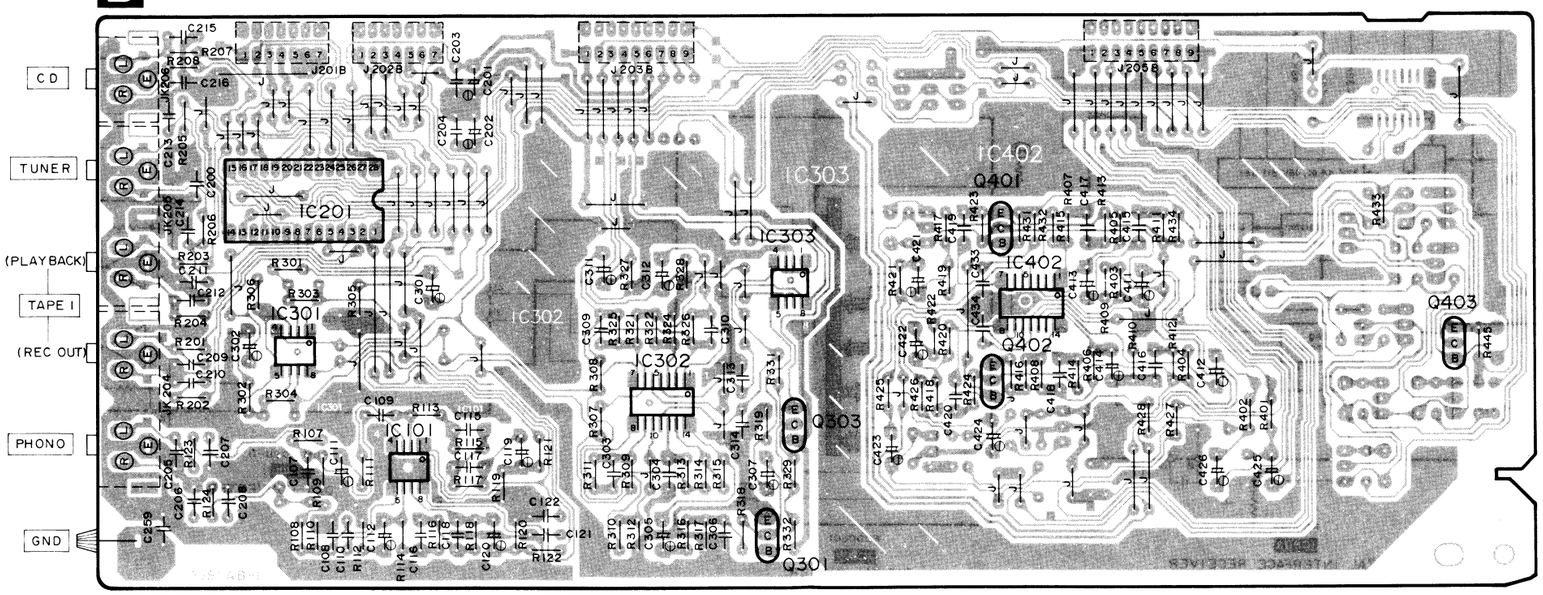

## G OPERATION SWITCH P.C.B.



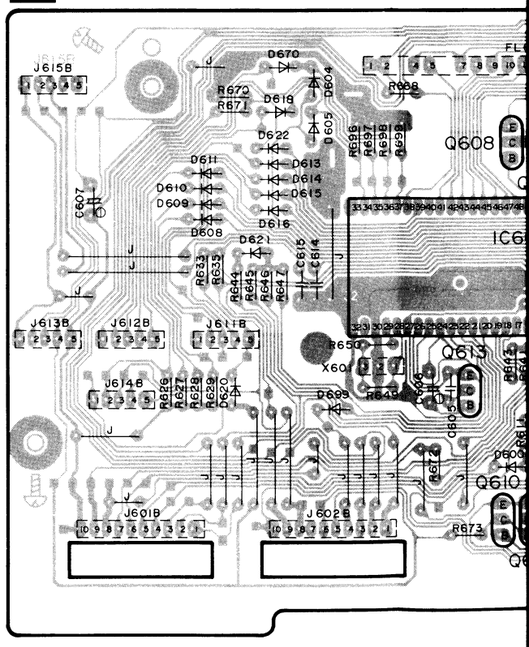

(PHONO) (TUNER) (AUX) (TAPE 2) (TAPE 1) (DIGITAL AUX) (CD) (DAT)

INPUT SELECTOR

## B PHONO/TAPE/TUNER/CD TERMINAL P.C.B.

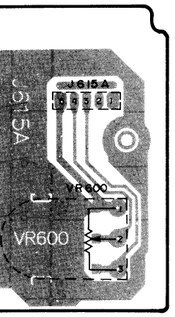


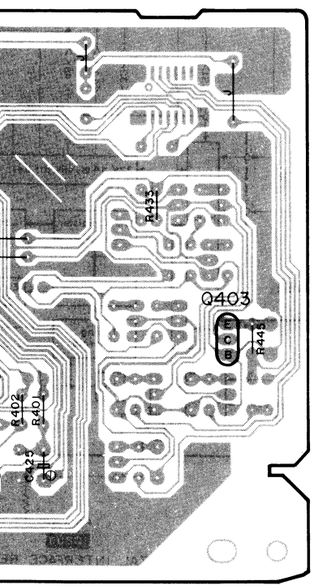

## E FL DRIVE P.C.B.



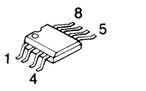
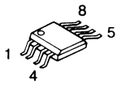
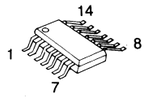
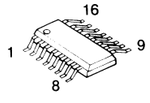
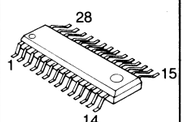
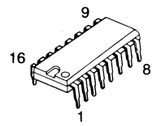
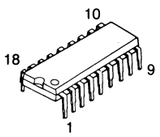
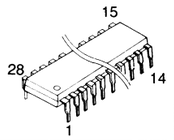
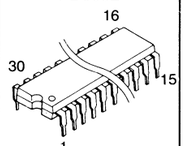
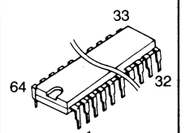
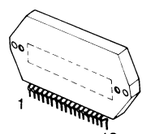
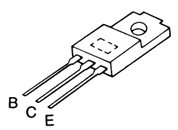
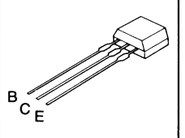
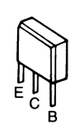
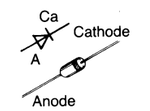
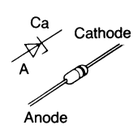
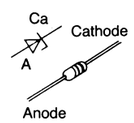
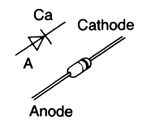
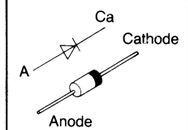
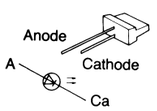
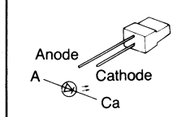
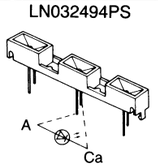
12 13 14 15 16 17 18 19 20 21 22

E P.C.B.





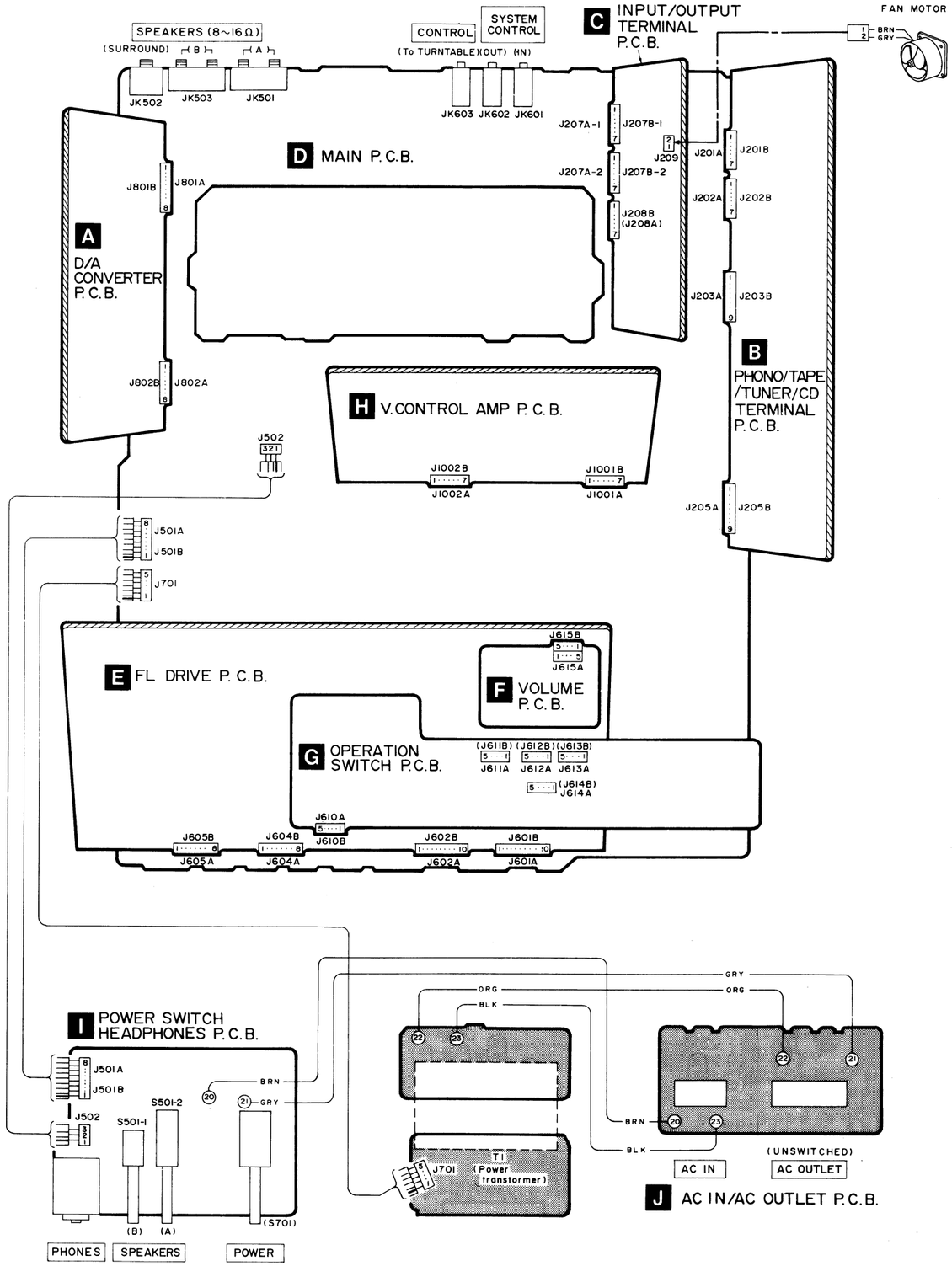
# ■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

| | | | |
|---|---|---|---|
| BA4560FT1  | AN6558SFE2<br>BA4560FT1<br>LM833M63  | AN6554NSFE2<br>MC74HCU04FEL  | DN74LS145SE2<br>PD00601  |
| PCM1700U-T1  | M5283P  | AN7062N  | TC9164N  |
| PD0052  | M50754-128SP  | SVI3205  | 2SA992EFPTA<br>2SA1123RSTTA<br>2SB621AQRSTA<br>2SC1567QRS<br>2SC2631RSTTA<br>2SC3114STUTA |
| 2SA1535AQRS<br>2SB1187DEF<br>2SC3944AQRS<br>2SD1761DEF  | 2SC2458ABCTA<br>2SD2144STA<br>DTA114ESTP<br>DTC114ESTP<br>DTC144ESTP  | 2SA1309AQSTA<br>2SC3311AQSTA<br>2SD1450RSTTA<br>UN4115TA<br>UN4215TA  | MA165TA<br>MA167TA<br>MA29WATA<br>1SS291TA  |
| MA4120MTA<br>MA4150MTA<br>MA4160MTA<br>MA4300MTA  | MA4036MTA<br>MA4043MTA<br>MA4047MTA<br>MA4051MTA<br>MA4062HTA  | MA700ATA  | RVDP300DLF  |
| | | LN820RP-C  | LN846RP-C  |
| LN032494PS  | | | |

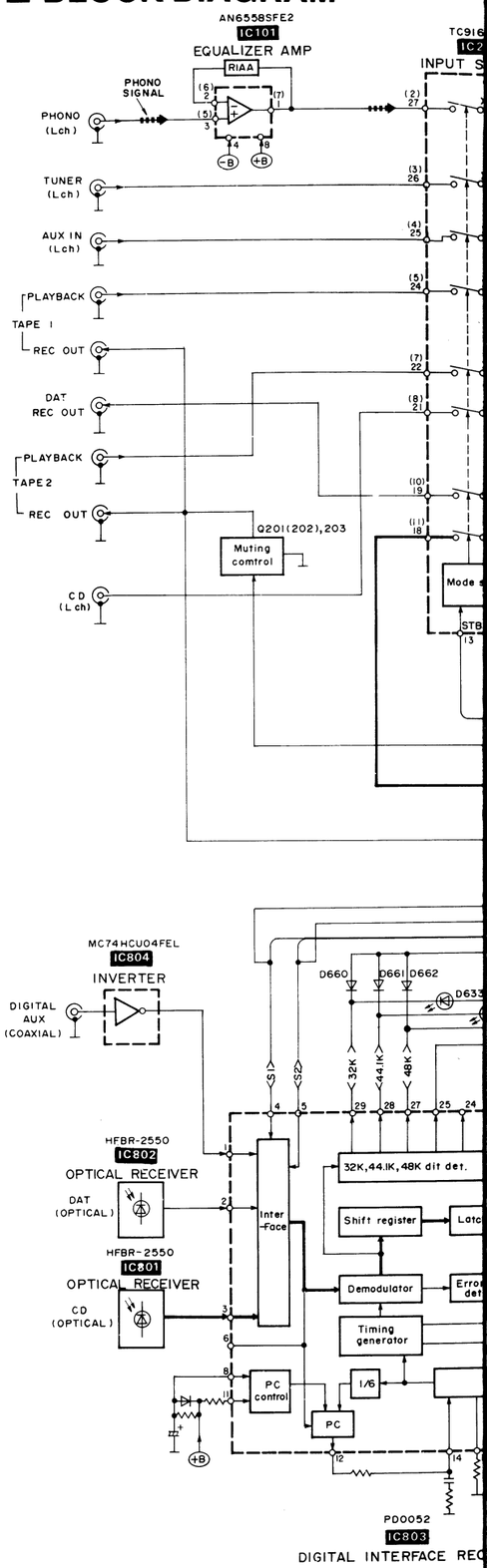




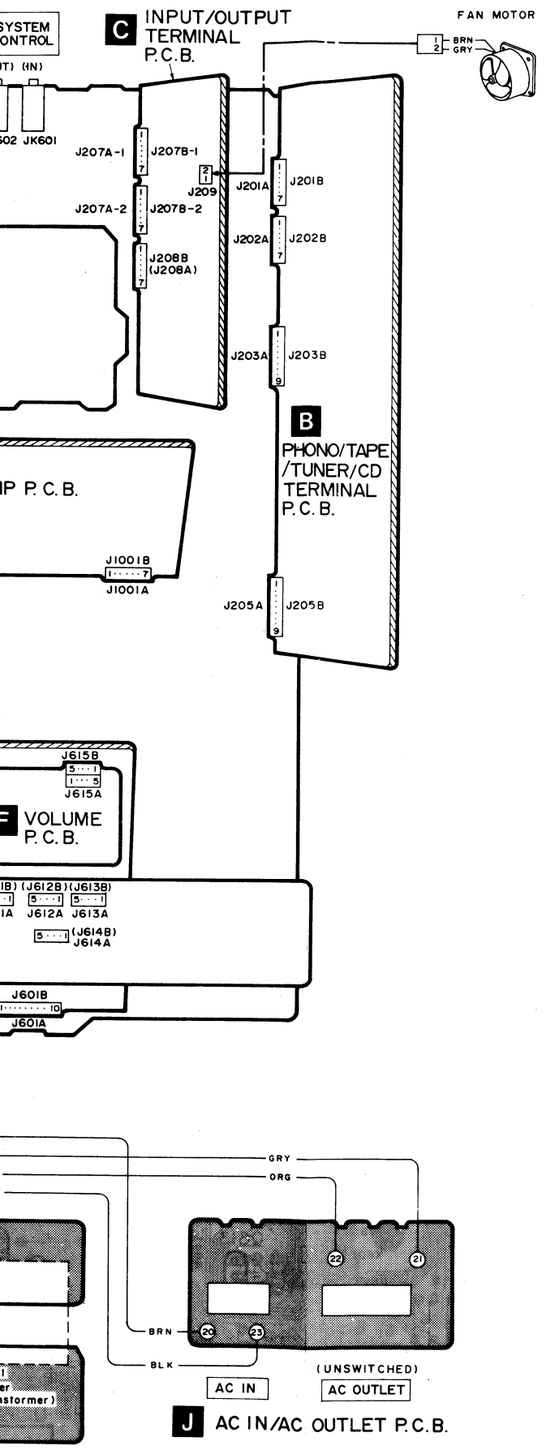
# ■ WIRING CONNECTION DIAGRAM

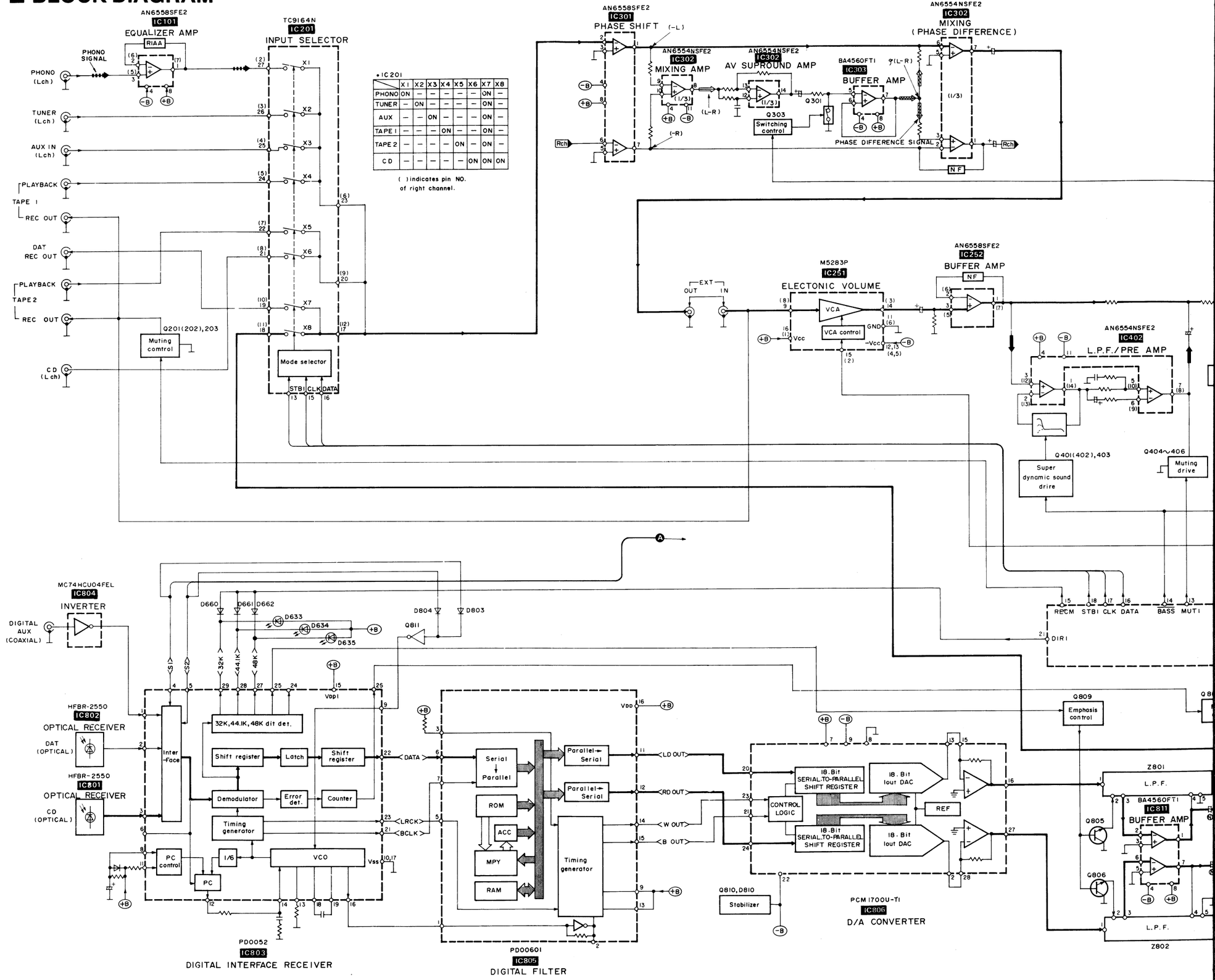



# ■ BLOCK DIAGRAM



# ■ BLOCK DIAGRAM



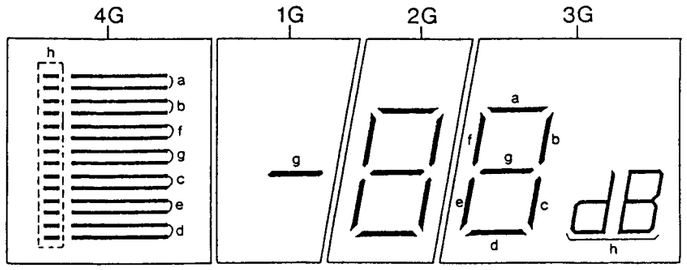
| | X6 | X7 | X8 |
|---|---|---|---|
| | | ON | — |
| | | ON | — |
| | | ON | — |
| | | ON | — |
| | | ON | — |
| N | ON | ON | |

AN6558SFE2 IC301 PHASE SHIFT (-L) (-R)
AN6554NSFE2 IC302 MIXING AMP
AN6554NSFE2 IC302 AV SUPROUND AMP
BA4560FTI IC303 BUFFER AMP
AN6554NSFE2 IC302 MIXING (PHASE DIFFERENCE)
Q303 Switching control
Q301
9(L-R)
PHASE DIFFERENCE SIGNAL
N.F
Rch
VR401 (BALANCE)
Class AA voltage control amplifier
D1401
Current mirror
Cascode
Current stabilizer
Bias
Muting
Q1401 Pre drive
Current stabilizer
Q1451
Q1453 Limiter
D1453
AA class amp
Q1457,1461
Q1465
ICQ adj
Q1459,1463 AA class amp
D1455
Limiter Q1455
AN7062N IC1401 VOLTAGE AMP
AN6558SFE2 IC401 TONE AMP
Treble
Bass
M5283P IC251 ELECTONIC VOLUME
EXT OUT IN
VCA
VCA control
Vcc
-Vcc
GND
AN6558SFE2 IC252 BUFFER AMP
AN6554NSFE2 IC402 L.P.F./PRE AMP
Q407~409 Muting drive
Q404~406 Muting drive
Q401(402),403 Super dynamic sound drire
Q501(502),503 Muting drive
LM833M63 IC603 BUFFER AMP
D641~645,636
DN74LS145SE2 IC604 LED DRIVE
LED DRIVE
D646~648
Q615~619
S1 S2
VOLUME VR600
D606
Q504,505 Motor drive
FAN MOTOR
D509
D501
S501-2 (A)
S501-1 (B)
(SPEAKERS)
SPEAKERS (8~16Ω)
L ch/A
L ch/B
L ch
SURROUND
R ch
HEADPHONES
SV13205 IC501 POWER AMP
Bias
Mute det.
AC det.
Q510 Relay drive
PLY501
INPUT
SYSTEM CONTROL
OUTPUT
CONTROL (To TURNTABLE)
Q600~603
SYSTEM CONTROL DRIVE
REQM STBI CLK DATA BASS MUT1 MUT2 MUT3 VR TWM SEL1 SEL4 MUT D SURR VRA VRB CNVss Vpp B.DATA OUT B.DATA IN B.CLK OUT B.CLK IN PLSTP PLSY PLST/PHONO
M50754-128SP IC602 MICROCOMPUTER
DIR1
XIN XOUT VP Vss SI~S8 KS0~KS3 GI/K0~G6/K4 HLT/HST RESET
X601
KEY MATRIX
FL Drive
Q605~608
FL600
FL DISPLAY
Q613
Q604
D699
Q701
D704,705
Q705 Regulator
Q703,706 Regulator
Q704 Regulator
Q702 Regulator
D707~710
T1 Power transformer
AC OUTLET (UNSWITCHED)
AC IN
F2
S701 (POWER)
F1
FL
Q809 Emphasis control
Q802~804 Muting control
Z801 L.P.F.
BA4560FTI IC811 BUFFER AMP
Q805
Q806
Q807
Q808
Z802 L.P.F.
Rch
Serial Parallel
ROM
ACC
MPY
RAM
Timing generator
Parallel-Serial
LD OUT
RD OUT
W OUT
B OUT
Vpp
CONTROL LOGIC
18.Bit SERIAL-TO-PARALLEL SHIFT REGISTER
18.Bit Iout DAC
REF
Q810,D810 Stabilizer
PCM1700U-T1 IC806 D/A CONVERTER
PD00601 IC805 DIGITAL FILTER

Notes:
: CD SIGNAL
: PHONO SIGNAL
: MAIN SIGNAL
: PHASE DIFFERENCE SIGNAL
: SUPER BASS SIGNAL

# ■ DESCRIPTION OF FL PANEL [FL600 (SADFV217)]

## • GRID ASSIGNMENT




## •PIN CONNECTION

| Pin No. | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Connection | F2 | F2 | NP | a | 4G | b | c | d | 1G | e | f | 2G | g | 3G | NP | h | 3G | NP | F1 | F1 |

# ■ FUNCTIONS OF IC TERMINALS

## •IC805 (PD00601)

| Pin No. | Symbol | I/O | Function Description |
|---|---|---|---|
| 1 | X IN | I | These are the I/O terminals for the oscillating clock signal. |
| 2 | X OUT | O | |
| 3 | MODE 1 | I | Master clock input terminal. |
| 5 | LR CLK | I | LR clock input terminal. |
| 6 | DATA | I | Serial data input terminal. |
| 7 | BCK | I | Bit clock input terminal. |
| 9 • 13 | MODE 2 • MODE 3 | I | Select the output data. |

| MODE 3 | MODE 2 | OUTPUT DATA |
|---|---|---|
| H | H | 18 bit |
| | L | 16 bit |
| L | — | 20 bit |

| | | | |
|---|---|---|---|
| 11 | LD OUT | O | Output the signal on the left channel. |
| 12 | RD OUT | O | Output the signal on the right channel. |
| 14 | W OUT | O | Output the signal for the word clock. |
| 15 | B OUT | O | Output the signal for the bit clock. |
| 16 | VDD | I | To be connected to a power supply. (+5 V) |



## •IC602 (M50754–128SP)

| Pin No. | Symbol | I/O | Function Description |
|---|---|---|---|
| 1 | VDD | — | To be connected to a power supply. (+5 V) |
| 2 | B. DATA OUT | O | This is the output terminal for the bus data signal. |
| 3 | B. CLK OUT | O | This is the output terminal for the bus clock signal. |
| 6 | VR PWM | O | This terminal outputs the signal for the control of the volume. |
| 7 | B. DATA IN | I | This is the input terminal for the bus data signal. |
| 8 | B. CLK IN | I | This is the input terminal for the bus clock signal. |
| 9 | VR A | I | These are the terminals for the rotary encoder of the volume of VR600. |
| 10 | VR B | | |
| 11 | MUT 3 | O | Outputs the −6 dB signal for control of attenuated muting. |
| 12 | MUT 2 | | |
| 13 | MUT 1 | O | Output the signal for the control of muting. |
| 14 | $\overline{\text{BASS}}$ | O | Output the signal for the control of super bass LED. |
| 15 | REC M | O | Output the signal for muting the VTR 1 recording. |
| 16 | DATA | O | These are output terminal for data and clock signals. |
| 17 | CLK | | |
| 18 | STB 1 | O | The serial data inputted into IC201 is latched by the STB pulse and the switch is set to ON according to data. |
| 22 | $\overline{\text{PLST}}$/PHONO | O | These are the terminals for sync recording on the player. |
| 23 | $\overline{\text{PLSY}}$ | I | |
| 24 | $\overline{\text{HLT}}$/HST | I | This is the terminal for the detection of power supply. |
| 25 | KS4 | I | This is the key scan terminal. |
| 27 | $\overline{\text{RESET}}$ | I | This is the input terminal for the reset signal. |
| 28 | X IN | I | These are the I/O terminals for the oscillating clock signal. |
| 29 | X OUT | O | |
| 34 ~ 37 | KS 3 ~ KS 0 | I | These are the key scan terminals. |
| 38 | VP | I | The signal which pulls down the voltage is inputted into this terminal. |
| 39 | PLS TP | O | This is the terminal for sync recording on the player. |
| 41 ~ 48 | S8 ~ S1 | O | There terminals output signals for the control of the FL display. |
| 52 ~ 56 | G5/K4 ~ G1/K0 | | |
| 57 ~ 60 | SEL 1 ~ SEL 4 | O | Output the signal for the control of the LED. |
| 61 | MUT D | | |
| 62 | $\overline{\text{SURR}}$ | | |

# ■ REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | | |
| | | INTEGRATED CIRCUIT(S) | |
| | | | |
| IC101 | AN6558SFE2 | IC, PHONO EQ AMP. | |
| IC201 | TC9164N | IC, INPUT SELECTOR | |
| IC251 | M5283P | IC, ATTENUATOR | |
| IC252 | AN6558SFE2 | IC, BUFFER AMP. | |
| IC301 | AN6558SFE2 | IC, PHASE SHIFT | |
| IC302 | AN6554NSFE2 | IC, MIXING/PHASE SHIFT | |
| IC303 | BA4560FT1 | IC, BUFFER AMP. | |
| IC401 | AN6558SFE2 | IC, TONE AMP. | |
| IC402 | AN6554NSFE2 | IC, PRE/BUFFER AMP. | |
| IC501 | SVI3205 | IC, POWER AMP. | |
| IC602 | M50754-128SP | IC, MICROCOMPUTER | |
| IC603 | LM833M63 | IC, BUFFER AMP. | |
| IC604 | DN74LS145SE2 | IC, LED DRIVE | |
| IC801, 802 | HFBR-2550 | IC, OPTICAL RECEVER | |
| IC803 | PD0052 | IC, DIGITAL INTERFACE | |
| IC804 | MC74HCU04FEL | IC, INVERTER | |
| IC805 | PD00601 | IC, DIGITAL FILTER | |
| IC806 | PCM1700U-T1 | IC, D/A CONVERTER | |
| IC811 | BA4560FT1 | IC, BUFFER AMP. | |
| IC1401 | AN7062N | IC, VOLTAGE AMP. | |
| | | | |
| | | TRANSISTOR(S) | |
| | | | |
| Q201, 202 | 2SD2144STA | TRANSISTOR | |
| Q203 | DTA114ESTP | TRANSISTOR | |
| Q205 | 2SC3311AQSTA | TRANSISTOR | |
| Q206 | 2SA1309AQSTA | TRANSISTOR | |
| Q301 | 2SD2144STA | TRANSISTOR | |
| Q303 | DTA114ESTP | TRANSISTOR | |
| Q401, 402 | 2SD2144STA | TRANSISTOR | |
| Q403, 404 | DTA114ESTP | TRANSISTOR | |
| Q405-408 | 2SD2144STA | TRANSISTOR | |
| Q409 | 2SA1309AQSTA | TRANSISTOR | |
| Q501, 502 | 2SD1450RSTTA | TRANSISTOR | |
| Q503 | 2SA1309AQSTA | TRANSISTOR | |
| Q504 | 2SC2458ABCTA | TRANSISTOR | |
| Q505 | 2SA1309AQSTA | TRANSISTOR | |
| Q510 | 2SA992EFPTA | TRANSISTOR | |
| Q600, 601 | 2SC3311AQSTA | TRANSISTOR | |
| Q602, 603 | DTC144ESTP | TRANSISTOR | |
| Q604 | UN4115TA | TRANSISTOR | |
| Q605-608 | DTC114ESTP | TRANSISTOR | |
| Q609, 610 | 2SC3311AQSTA | TRANSISTOR | |
| Q613 | DTC114ESTP | TRANSISTOR | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| Q615 | DTC114ESTP | TRANSISTOR | |
| Q616, 617 | UN4215TA | TRANSISTOR | |
| Q618, 619 | DTA114ESTP | TRANSISTOR | |
| Q701 | UN4215TA | TRANSISTOR | |
| Q702 | 2SB621AQRSTA | TRANSISTOR | |
| Q703 | 2SD1761DEF | TRANSISTOR | |
| Q704 | 2SB1187DEF | TRANSISTOR | |
| Q705, 706 | 2SD1761DEF | TRANSISTOR | |
| Q802, 803 | DTC114ESTP | TRANSISTOR | |
| Q804 | DTA114ESTP | TRANSISTOR | |
| Q805, 806 | 2SC3114STUTA | TRANSISTOR | |
| Q807, 808 | 2SD2144STA | TRANSISTOR | |
| Q809 | DTA114ESTP | TRANSISTOR | |
| Q810 | 2SC3311AQSTA | TRANSISTOR | |
| Q811 | DTC114ESTP | TRANSISTOR | |
| Q1401, 1402 | 2SA1123-R | TRANSISTOR | |
| Q1451, 1452 | 2SC2631-R | TRANSISTOR | |
| Q1453, 1454 | 2SC3311AQSTA | TRANSISTOR | |
| Q1455, 1456 | 2SA1309AQSTA | TRANSISTOR | |
| Q1457, 1458 | 2SC2631-R | TRANSISTOR | |
| Q1459, 1460 | 2SA1123-R | TRANSISTOR | |
| Q1461, 1462 | 2SC3944AQRS | TRANSISTOR | |
| Q1463, 1464 | 2SA1535AQRS | TRANSISTOR | |
| Q1465, 1466 | 2SC1567QRS | TRANSISTOR | |
| | | | |
| | | DIODE(S) | |
| | | | |
| D401 | MA165TA | DIODE | |
| D501, 502 | MA167TA | DIODE | |
| D503 | MA165TA | DIODE | |
| D504 | MA4051MTA | DIODE | |
| D507, 508 | MA4120MTA | DIODE | |
| D509, 510 | MA167TA | DIODE | |
| D515 | MA4160MTA | DIODE | |
| D600, 601 | MA700ATA | DIODE | |
| D602 | MA165TA | DIODE | |
| D603 | MA4047MTA | DIODE | |
| D604-611 | MA165TA | DIODE | |
| D613-616 | MA165TA | DIODE | |
| D618 | MA165TA | DIODE | |
| D619 | 1SS291TA | DIODE | |
| D620, 621 | MA165TA | DIODE | |
| D622 | MA700ATA | DIODE | |
| D627-630 | MA165TA | DIODE | |
| D633-635 | LN846RP-C | LED | |
| D636 | LN038494PS | LED | |
| D641-645 | LN820RP-C | LED | |



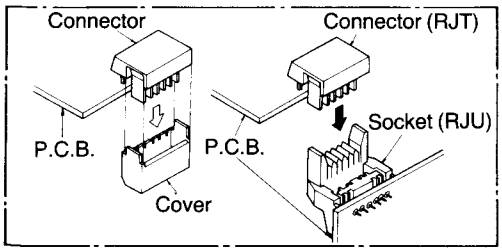
| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| D646-648 | LN846RP-C | LED | |
| D660-662 | MA165TA | DIODE | |
| D670, 671 | MA165TA | DIODE | |
| D699 | MA165TA | DIODE | |
| D701, 702 | MA4150MTA | DIODE | |
| D703 | MA165TA | DIODE | |
| D704, 705 | MA167TA | DIODE | |
| D706 | MA4062HTA | DIODE | |
| D707-710 | RVDP300DLF | DIODE | ⚠ |
| D713 | MA4300MTA | DIODE | |
| D801 | MA165TA | DIODE | |
| D803, 804 | MA165TA | DIODE | |
| D809 | MA4051LTA | DIODE | |
| D810 | MA4043MTA | DIODE | |
| D1401, 1402 | MA167ATA | DIODE | |
| D1403, 1404 | MA4036MTA | DIODE | |
| D1405, 1406 | MA165TA | DIODE | |
| D1451, 1452 | MA29WATA | DIODE | |
| D1453-1456 | MA165TA | DIODE | |
| | | | |
| | | VARIABLE RESISTOR(S) | |
| | | | |
| VR401 | EWHFDAF25G15 | BALANCE CONTROL | |
| VR402, 403 | EWC2XAF25C15 | BASS/TREBLE CONTROL | |
| VR600 | EVQWWVF2024B | MAIN VOLUME | |
| VR1451 | EVNDCAA03B52 | IDLING(ICQ) ADJUSTMENT | |
| VR1452 | EVNDCAA03B52 | IDLING(ICQ) ADJUSTMENT | |
| | | | |
| | | THERMISTOR(S) | |
| | | | |
| TH1451 | ERTD2ZHL104T | THERMISTOR | |
| TH1452 | ERTD2ZHL104T | THERMISTOR | |
| | | | |
| | | COMPONENT COMBINATION(S) | |
| | | | |
| Z801, 802 | H8DN2041B | COMPONENT COMBINATION | |
| | | | |
| | | COIL(S) | |
| | | | |
| L501, 502 | SLQY18G-10 | COIL | |
| L563-566 | SLQY07G-40 | COIL | (EG) |
| L601 | RLQZP100KT-Y | COIL | |
| L602-604 | RLQZP101KT-Y | COIL | |
| L801 | RLQZP470KT-Y | COIL | |
| L802 | RLQZP101KT-Y | COIL | |
| L803 | RLQZP3R3KT-Y | COIL | |
| L804 | RLQZP1R2KT-Y | COIL | |
| L805 | RLQZP3R3KT-Y | COIL | |
| L806 | RLQZP1R2KT-Y | COIL | |
| L807 | RLQZP3R3KT-Y | COIL | |
| L808-810 | RLQZP1R2KT-Y | COIL | |
| L811 | RLQZP3R3KT-Y | COIL | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| L1501, 1502 | SLQY18G-10 | COIL | |
| | | | |
| | | OSCILLATOR(S) | |
| | | | |
| X601 | EF0GC6004T4 | OSCILLATOR | |
| | | | |
| | | DISPLAY TUBE | |
| | | | |
| FL600 | SADFV217 | DISPLAY TUBE | |
| | | | |
| | | FUSE(S) | |
| | | | |
| F1, 2 | XBA2C20TB0 | FUSE 250V T2.0A | ⚠ |
| | | | |
| | | SWITCH(ES) | |
| | | | |
| S501-1 | SSH2128 | SW, SP SELECTOR B | |
| S501-2 | SSH2128 | SW, SP SELECTOR A | |
| S600 | EVQ21405R | SW, SURROUND SOUND | |
| S601 | EVQ21405R | SW, SUPER BASS | |
| S602 | EVQ21405R | SW, AUDIO MUTING | |
| S603 | EVQ21405R | SW, VOLUME PRESET | |
| S604 | EVQ21405R | SW, INPUT SELECTOR(DAT) | |
| S605 | EVQ21405R | SW, INPUT SELECTOR(CD) | |
| S606 | EVQ21405R | SW, INPUT SELECTOR(D. AUX) | |
| S607 | EVQ21405R | SW, INPUT SELECTOR(TAPE1) | |
| S608 | EVQ21405R | SW, INPUT SELECTOR(TAPE2) | |
| S609 | EVQ21405R | SW, INPUT SELECTOR(AUX) | |
| S610 | EVQ21405R | SW, INPUT SELECTOR(TUNER) | |
| S611 | EVQ21405R | SW, INPUT SELECTOR(PHONO) | |
| S701 | ESB8249V | SW, POWER | ⚠ |
| | | | |
| | | JACK(S) | |
| | | | |
| J209 | SJT3213 | CONNECTOR(2P) | |
| J502 | RJS1A1703 | CONNECTOR(3P) | |
| J701 | RJS1A1705 | CONNECTOR(5P) | |
| J201A | RJT057W007 | CONNECTOR(7P) | |
| J202A | RJT057W007 | CONNECTOR(7P) | |
| J203A | RJT057W009 | CONNECTOR(9P) | |
| J205A | RJT057W009 | CONNECTOR(9P) | |
| J208A | RJT057W007 | CONNECTOR(7P) | |
| J501A | RJS1A1704 | CONNECTOR(4P) | |
| J601A | RJU003K010M1 | SOCKET(10P) | (Black) |
| | SJT31054WF | CONNECTOR(10P) | (Ivory) |
| J602A | RJU003K010M1 | SOCKET(10P) | (Black) |
| | SJT31054WF | CONNECTOR(10P) | (Ivory) |
| J604A | RJU003K008M1 | SOCKET(8P) | (Black) |
| | SJT30854WF | CONNECTOR(8P) | (Ivory) |
| J605A | RJU003K008M1 | SOCKET(8P) | (Black) |
| | SJT30854WF | CONNECTOR(8P) | (Ivory) |
| J610A | SJS50581BB | SOCKET(5P) | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| J611A | SJS50581BB | SOCKET(5P) | |
| J612A | SJS50581BB | SOCKET(5P) | |
| J613A | SJS50581BB | SOCKET(5P) | |
| J614A | SJS50581BB | SOCKET(5P) | |
| J615A | SJS50581BB | SOCKET(5P) | |
| J801A | RJT057W009 | CONNECTOR(9P) | |
| J802A | RJT057W007 | CONNECTOR(7P) | |
| J1001A | RJT057W007 | CONNECTOR(7P) | |
| J1002A | RJT057W007 | CONNECTOR(7P) | |
| J207A-1, 2 | RJT057W007 | CONNECTOR(7P) | |
| J207B-1, 2 | RJU057W007 | SOCKET(7P) | |
| J201B | RJU057W007 | SOCKET(7P) | |
| J202B | RJU057W007 | SOCKET(7P) | |
| J203B | RJU057W009 | SOCKET(9P) | |
| J205B | RJU057W009 | SOCKET(9P) | |
| J208B | RJU057W007 | SOCKET(7P) | |
| J501B | RJS1A1704 | CONNECTOR(4P) | |
| J601B | RJT003K010M1 | CONNECTOR(10P) | (Black or Gray) |
| | SJS51087WF | SOCKET(10P) | (Ivory) |
| J602B | RJT003K010M1 | CONNECTOR(10P) | (Black or Gray) |
| | SJS51087WF | SOCKET(10P) | (Ivory) |
| J604B | RJT003K008M1 | CONNECTOR(8P) | (Black or Gray) |
| | SJS50887WF | SOCKET(8P) | (Ivory) |
| J605B | RJT003K008M1 | CONNECTOR(8P) | (Black or Gray) |
| | SJS50887WF | SOCKET(8P) | (Ivory) |
| J610B | SJT30549BB1 | CONNECTOR(5P) | |
| J611B | SJT30549BB1 | CONNECTOR(5P) | |
| J612B | SJT30549BB1 | CONNECTOR(5P) | |
| J613B | SJT30549BB1 | CONNECTOR(5P) | |
| J614B | SJT30549BB1 | CONNECTOR(5P) | |
| J615B | SJT30549BB1 | CONNECTOR(5P) | |

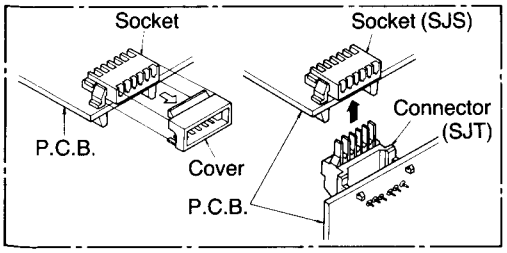
| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| J801B | RJU057W009 | SOCKET(9P) | |
| J802B | RJU057W007 | SOCKET(7P) | |
| J1001B | RJU057W007 | SOCKET(7P) | |
| J1002B | RJU057W007 | SOCKET(7P) | |
| JK201 | SJF3069N | EXT IN/OUT | |
| JK202 | SJF3069N | TAPE2 PB/AUX | |
| JK203 | SJF3069N | DAT/TAPE2 REC OUT | |
| JK204 | SJF3067N | PHONO/TAPE1 REC OUT | |
| JK205 | SJF3069N | TAPE1 PB/TUNER | |
| JK206 | SJF3068N | CD | |
| JK501 | RJR0054 | SP A | |
| JK502 | SJF3068-4N | SP SURROUND | |
| JK503 | RJR0054 | SP B | |
| JK503A | RJJ67TS02 | H.P JACK | |
| JK601 | RJJ33T01 | SYSTEM CONTROL IN | |
| JK602 | RJJ33T01 | SYSTEM CONTROL OUT | |
| JK603 | RJJ33T01 | TURN TABLE CONTROL | |
| JK801 | SJFD7-2 | DIGITAL INPUT | |
| | | | |
| | | FUSE HOLDER(S) | |
| | | | |
| FC1-4 | SJT388 | FUSE HOLDER | |
| | | | |
| | | RELAY | |
| | | | |
| RLY501 | SSY134 | RELAY | |
| | | | |
| | | TRANJFORMER(S) | |
| | | | |
| T1 | SLT5P289-W | POWER TRANSFORMER | ⚠(E, EG) |
| T1 | SLT5P288-W | POWER TRANSFORMER | ⚠(EB) |

Ⓐ




| Pins | Part No. | |
|---|---|---|
| 8 pin | RJT003K008M1 | (Black or Gray) |
| 8 pin | RJU003K008M1 | (Black) |
| 10 pin | RJT003K010M1 | (Black or Gray) |
| 10 pin | RJU003K010M1 | (Black) |

Ⓑ




| Pins | Part No. | |
|---|---|---|
| 8 pin | SJS50887WF | (Ivory) |
| 8 pin | SJT30854WF | (Ivory) |
| 10 pin | SJS51087WF | (Ivory) |
| 10 pin | SJT31054WF | (Ivory) |

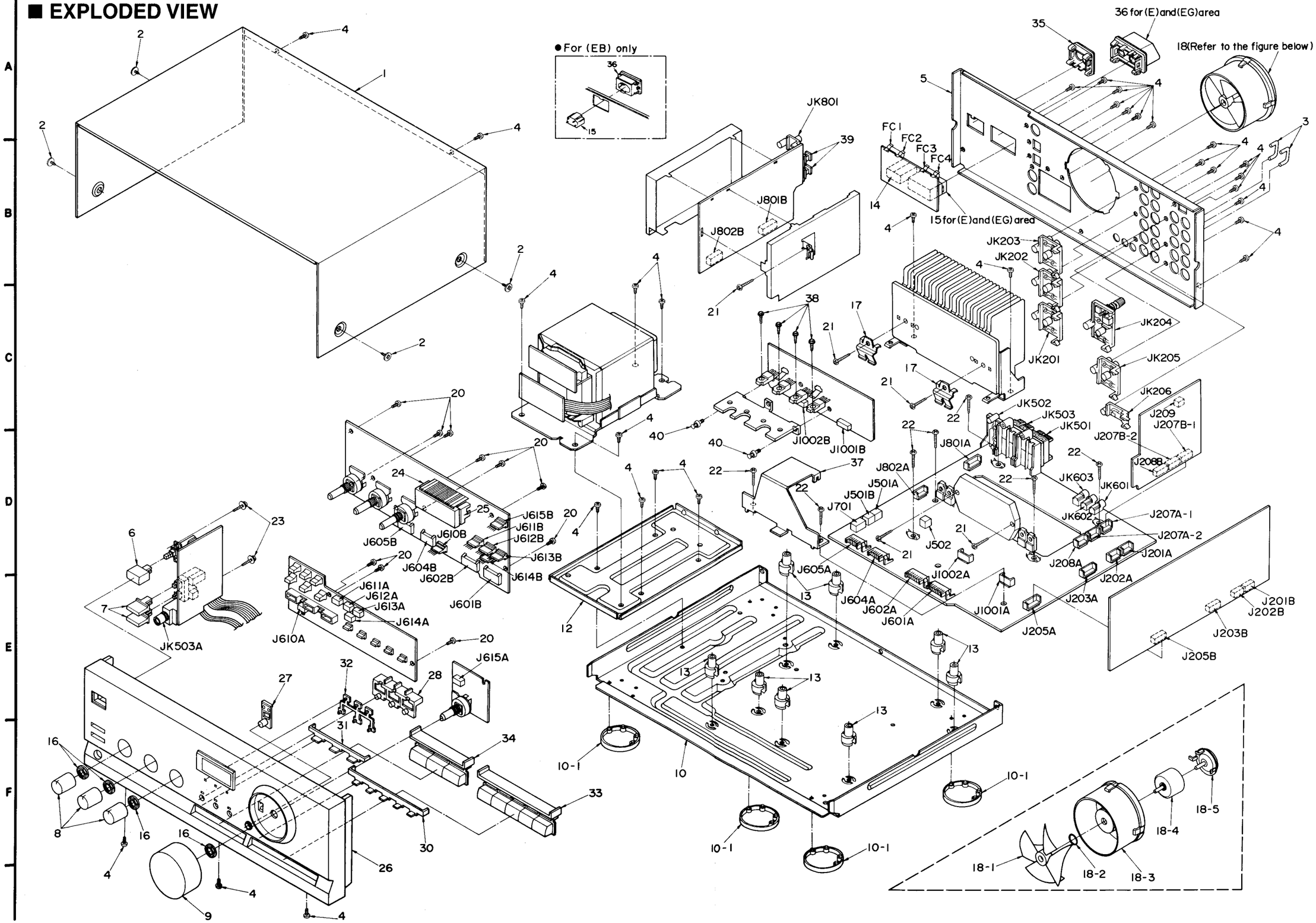
**Notes:**

- Regarding Ref. No. J601A, J602A, J604A, J605A, J601B, J602B, J604B, J605B, there are two types (Ⓐ and Ⓑ).
- Be sure to order the replacement parts of the desired color by the corresponding part numbers.
- The type-Ⓐ connector and the type-Ⓑ socket are protected with covers when they are supplied. Remove the cover after soldering the connector or socket to P.C.B.

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | | |
| | | CABINET PARTS | |
| | | | |
| 1 | RKM0024A-2K | CABINET | |
| 2 | RHD30007 | SCREW | |
| 3 | SJP9205-2Y | SHORTING PIN | |
| 4 | XTBS3+8JFZ1 | SCREW | |
| 5 | RGR0083B-A | REAR PANEL | (E) |
| 5 | RGR0083A-A | REAR PANEL | (EB) |
| 5 | RGR0083B-B | REAR PANEL | (EG) |
| 6 | RGU0030 | POWER BUTTON | |
| 7 | RGU0101 | SP SELECTOR BUTTON | |
| 8 | RGW0028-1K | TONE KNOB | |
| 9 | RGW0049 | MAIN VOL KNOB | |
| 10 | RFKJUX301E-K | CHASSIS ASS'Y | |
| 10-1 | RKA0011 | FOOT | |
| 12 | RMA0138 | ANGLE | |
| 13 | SHE187-2 | HOLDER | |
| 14 | SJS9231-1B | AC INLET | ⚠ |
| 15 | SJS9333B | AC OUTLET | ⚠(E, EG) |
| 15 | SJS9332B | AC OUTLET | ⚠(EB) |
| 16 | SNE4021-1 | NUT | |
| 17 | SUS894-1 | SPRING | |
| 18 | SYE1128-3 | FAN ASS'Y | |
| 18-1 | SHE232 | FAN | |
| 18-2 | SUS271 | SPRING | |
| 18-3 | SHE233 | FAN CASE | |
| 18-4 | MDN-4RB4MRC | MOTOR | |
| 18-5 | SHE234 | CAP | |
| 20 | XTBS26+8J | SCREW | |
| 21 | XTB3+16J | SCREW | |
| 22 | XTB3+20JFZ | SCREW | |
| 23 | XTWS3+8T | SCREW | |
| 24 | SMN2056 | FL HOLDER(L) | |
| 25 | SMN2056-1 | FL HOLDER(R) | |
| 26 | RFKGUX901E-K | FRONT PANEL | |
| 27 | RFKNUX901EK1 | VOL PRESET BUTTON | |
| 28 | RFKNUX901EK2 | SURROUND(etc) BUTTON | |
| 30 | RGL0080-X | PANEL LIGHT | |
| 31 | RGL0081-X | PANEL LIGHT | |
| 32 | RGL0082-X | PANEL LIGHT | |
| 33 | RGU0361-K | INPUT SELECTOR BUTTON | |
| 34 | RGU0362-K | DIGITAL SELECTOR BUTTON | |
| 35 | SJS9231A | AC INLET COVER | ⚠ |
| 36 | SJS9333A | AC OUTLET COVER | ⚠(E, EG) |
| 36 | SJS9332A | AC OUTLET COVER | ⚠(EB) |
| 37 | RMN0072 | ANGLE | |
| 38 | XTB3+8J | SCREW | |
| 39 | RFKNUX901EKA | CAP | |
| 40 | SHR415 | LATCH | |
| | | | |
| | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | | |
| | | PACKING MATERIAL | |
| | | | |
| P1 | RPG0469 | CARTON BOX | |
| P2 | RPN0332 | PAD | |
| P3 | SPSD152 | ACCESSORIES BOX | |
| P4 | XZB52X60A01Z | PROTECTION COVER | |
| | | | |
| | | ACCESSORIES | |
| | | | |
| A1 | RQF0574 | INSTRUCTIONS MANUAL ASS'Y | (E) |
| A1 | RQF0573 | INSTRUCTIONS MANUAL ASS'Y | (EB) |
| A1 | RQF0575 | INSTRUCTIONS MANUAL ASS'Y | (EG) |
| A1-1 | RQA0013 | WARRANTY CARD | (E, EG) |
| A1-2 | RQCB0169 | SERVICENTOR LIST | |
| A1-3 | RFKSUX901E-K | INSTRUCTIONS MANUAL | (E) |
| A1-3 | RQT0486-B | INSTRUCTIONS MANUAL | (EB) |
| A1-3 | RQT0470-D | INSTRUCTIONS MANUAL | (EG) |
| A1-4 | RQCS0009 | CAUTION NOTE FOR FTZ | (EG) |
| A2 | SFDAC05E03 | AC CORD | ⚠(E, EG) |
| A2 | SJA188 | AC CORD | ⚠(EB) |

# ■ EXPLODED VIEW



Notes : * Capacity valuse are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

| Ref. No. | Part No. | Values & Remarks |
|---|---|---|
| | | |
| | | RESISTORS |
| | | |
| R107, 108 | ERDS2TJ471T | 1/4W 470 |
| R109, 110 | ERDS2TJ473T | 1/4W 47K |
| R111, 112 | ERDS2TJ331T | 1/4W 330 |
| R113, 114 | ERDS2TJ680T | 1/4W 68 |
| R115, 116 | ERDS2TJ184T | 1/4W 180K |
| R117, 118 | ERDS2TJ123T | 1/4W 12K |
| R119, 120 | ERDS2TJ224T | 1/4W 220K |
| R121, 122 | ERDS2TJ102T | 1/4W 1K |
| R123, 124 | ERDS2TJ471T | 1/4W 470 |
| R201, 202 | ERDS2TJ472T | 1/4W 4.7K |
| R203-206 | ERDS2TJ102T | 1/4W 1K |
| R207, 208 | ERDS2TJ822T | 1/4W 8.2K |
| R209, 210 | ERDS2TJ102T | 1/4W 1K |
| R211, 212 | ERDS2TJ821T | 1/4W 820 |
| R213-220 | ERDS2TJ102T | 1/4W 1K |
| R221, 222 | ERDS2TJ392T | 1/4W 3.9K |
| R223, 224 | ERDS2TJ334T | 1/4W 330K |
| R225 | ERDS2TJ273T | 1/4W 27K |
| R230, 231 | ERDS2TJ102T | 1/4W 1K |
| R249 | ERDS2TJ103T | 1/4W 10K |
| R250 | ERDS2TJ223T | 1/4W 22K |
| R251, 252 | ERDS2TJ473T | 1/4W 47K |
| R253, 254 | ERDS2TJ183T | 1/4W 18K |
| R255, 256 | ERDS2TJ153T | 1/4W 15K |
| R257, 258 | ERDS2TJ473T | 1/4W 47K |
| R271, 272 | ERDS2TJ152T | 1/4W 1.5K |
| R297, 298 | ERDS2TJ182T | 1/4W 1.8K |
| R301-304 | ERDS2TJ223T | 1/4W 22K |
| R305, 306 | ERDS2TJ224T | 1/4W 220K |
| R307, 308 | ERDS2TJ332T | 1/4W 3.3K |
| R309, 310 | ERDS2TJ223T | 1/4W 22K |
| R311, 312 | ERDS2TJ393T | 1/4W 39K |
| R313-315 | ERDS2TJ223T | 1/4W 22K |
| R316 | ERDS2TJ622T | 1/4W 6.2K |
| R317 | ERDS2TJ562T | 1/4W 5.6K |
| R318 | ERDS2TJ123T | 1/4W 12K |
| R319 | ERDS2TJ224T | 1/4W 220K |
| R321, 322 | ERDS2TJ332T | 1/4W 3.3K |
| R324 | ERDS2TJ332T | 1/4W 3.3K |
| R325, 326 | ERDS2TJ392T | 1/4W 3.9K |
| R327, 328 | ERDS2TJ104T | 1/4W 100K |
| R329 | ERDS2TJ332T | 1/4W 3.3K |
| R331 | ERDS2TJ105T | 1/4W 1M |
| R332 | ERDS2TJ334T | 1/4W 330K |
| R401, 402 | ERDS2TJ153T | 1/4W 15K |
| R403, 404 | ERDS2TJ103T | 1/4W 10K |
| R405, 406 | ERDS2TJ393T | 1/4W 39K |
| R407, 408 | ERDS2TJ333T | 1/4W 33K |
| R409, 410 | ERDS2TJ103T | 1/4W 10K |
| R411, 412 | ERDS2TJ332T | 1/4W 3.3K |
| R413, 414 | ERDS2TJ153T | 1/4W 15K |
| R415, 416 | ERDS2TJ222T | 1/4W 2.2K |
| R417, 418 | ERDS2TJ221T | 1/4W 220 |
| R419, 420 | ERDS2TJ273T | 1/4W 27K |
| R421, 422 | ERDS2TJ470T | 1/4W 47 |
| R423, 424 | ERDS2TJ153T | 1/4W 15K |
| R425-428 | ERDS2TJ152T | 1/4W 1.5K |
| R429, 430 | ERDS2TJ333T | 1/4W 33K |
| R431, 432 | ERDS2TJ102T | 1/4W 1K |
| R433 | ERDS2TJ105T | 1/4W 1M |
| R434 | ERDS2TJ334T | 1/4W 330K |
| R435, 436 | ERDS2TJ102T | 1/4W 1K |
| R437 | ERDS2TJ105T | 1/4W 1M |
| R438 | ERDS2TJ334T | 1/4W 330K |
| R439, 440 | ERDS2TJ152T | 1/4W 1.5K |
| R441, 442 | ERDS2TJ222T | 1/4W 2.2K |
| R443, 444 | ERDS2TJ102T | 1/4W 1K |
| R445 | ERDS2TJ222T | 1/4W 2.2K |
| R446 | ERDS2TJ104T | 1/4W 100K |
| R447 | ERDS2TJ334T | 1/4W 330K |
| R448 | ERDS2TJ105T | 1/4W 1M |
| R449 | ERDS2TJ103T | 1/4W 10K |
| R450 | ERDS2TJ332T | 1/4W 3.3K |
| R471-474 | ERDS2TJ334T | 1/4W 330K |
| R477, 478 | ERDS2TJ102T | 1/4W 1K |
| R501 | ERDS2TJ104T | 1/4W 100K |
| R502 | ERDS2TJ105T | 1/4W 1M |
| R507, 508 | ERDS2TJ182T | 1/4W 1.8K |
| R509-512 | ERDS2TJ121T | 1/4W 120 |
| R513, 514 | ERDS2TJ392T | 1/4W 3.9K |
| R515, 516 | ERDS2TJ223T | 1/4W 22K |
| R517 | ERDS2TJ563T | 1/4W 56K |
| R518 | ERDS2TJ684T | 1/4W 680K |
| R519 | ERDS2TJ154T | 1/4W 150K |
| R520 | ERDS2TJ153T | 1/4W 15K |
| R521 | ERDS2TJ103T | 1/4W 10K |
| R522 | ERDS1FVJ680T | 1/2W 68 ⚠ |
| R524 | ERDS2TJ105T | 1/4W 1M |
| R525, 526 | ERD25FVJ100T | 1/4W 10 ⚠ |
| R527, 528 | ERDS1FVJ100T | 1/2W 10 ⚠ |
| R529 | ERG1SJ331E | 1W 330 |
| R530 | ERDS2TJ223T | 1/4W 22K |
| R531, 532 | ERG2ANJP331S | 2W 330 |
| R535-538 | ERDS2TJ472T | 1/4W 4.7K |
| R539 | ERDS2TJ102T | 1/4W 1K |
| R540 | ERDS2TJ334T | 1/4W 330K |
| R541 | ERDS2TJ223T | 1/4W 22K |
| R542 | ERDS2TJ332T | 1/4W 3.3K |
| R543 | ERDS1FVJ560T | 1/2W 56 ⚠ |
| R545, 546 | ERDS2TJ223T | 1/4W 22K |
| R551 | ERDS2TJ104T | 1/4W 100K |
| R552, 553 | ERG1SJ331E | 1W 330 |
| R554 | ERD25FVJ470T | 1/4W 47 ⚠ |
| R600 | ERDS2TJ331T | 1/4W 330 |
| R601 | ERDS2TJ223T | 1/4W 22K |
| R602-604 | ERDS2TJ393T | 1/4W 39K |
| R605 | ERDS2TJ223T | 1/4W 22K |
| R606-608 | ERDS2TJ393T | 1/4W 39K |
| R609-612 | ERDS2TJ100T | 1/4W 10 |
| R614, 615 | ERDS2TJ151T | 1/4W 150 |
| R626-629 | ERDS2TJ182T | 1/4W 1.8K |
| R631, 632 | ERDS2TJ103T | 1/4W 10K |
| R633 | ERDS2TJ332T | 1/4W 3.3K |
| R634-637 | ERDS2TJ103T | 1/4W 10K |
| R638, 639 | ERDS2TJ332T | 1/4W 3.3K |
| R640 | ERDS2TJ102T | 1/4W 1K |
| R641-643 | ERDS2TJ103T | 1/4W 10K |
| R644 | ERDS2TJ822T | 1/4W 8.2K |
| R645 | ERDS2TJ393T | 1/4W 39K |
| R646 | ERDS2TJ332T | 1/4W 3.3K |
| R647 | ERDS2TJ103T | 1/4W 10K |
| R648 | ERDS2TJ104T | 1/4W 100K |
| R649 | ERDS2TJ105T | 1/4W 1M |
| R650 | ERDS2TJ102T | 1/4W 1K |
| R651 | ERDS2TJ151T | 1/4W 150 |
| R652 | ERDS2TJ331T | 1/4W 330 |
| R662, 663 | ERDS2TJ103T | 1/4W 10K |
| R664 | ERDS2TJ223T | 1/4W 22K |
| R665, 666 | ERDS2TJ103T | 1/4W 10K |
| R667 | ERDS2TJ105T | 1/4W 1M |
| R668 | ERDS2TJ101T | 1/4W 100 |
| R670 | ERDS2TJ104T | 1/4W 100K |
| R671 | ERDS2TJ102T | 1/4W 1K |
| R672 | ERDS2TJ101T | 1/4W 100 |
| R673 | ERDS2TJ473T | 1/4W 47K |
| R674 | ERDS2TJ103T | 1/4W 10K |
| R680-682 | ERDS2TJ271T | 1/4W 270 |
| R683, 684 | ERDS2TJ101T | 1/4W 100 |
| R696-699 | ERDS2TJ104T | 1/4W 100K |
| R701, 702 | ERDS1FVJ472T | 1/2W 4.7K ⚠ |
| R703 | ERD25FVJ101T | 1/4W 100 ⚠ |
| R704 | ERDS2TJ473T | 1/4W 47K |
| R705 | ERDS2TJ103T | 1/4W 10K |
| R706 | ERDS1FVJ2R2T | 1/2W 2.2 ⚠ |



| Ref. No. | Part No. | Values & Remarks |
|---|---|---|
| R707 | ERDS1FVJ3R3T | 1/2W 3.3 ⚠ |
| R709 | ERDS2TJ562T | 1/4W 5.6K |
| R710 | ERDS1FVJ331T | 1/2W 330 ⚠ |
| R711 | ERDS2TJ102T | 1/4W 1K |
| R713 | ERDS2TJ2R2T | 1/4W 2.2 |
| R716 | ERDS2TJ2R2T | 1/4W 2.2 |
| R717 | ERDS2TJ330T | 1/4W 33 |
| R801 | ERDS2TJ750T | 1/4W 75 |
| R803 | ERDS2TJ104T | 1/4W 100K |
| R804 | ERDS2TJ182T | 1/4W 1.8K |
| R805 | ERDS2TJ122T | 1/4W 1.2K |
| R807 | ERDS2TJ100T | 1/4W 10 |
| R809 | ERDS2TJ122T | 1/4W 1.2K |
| R810 | ERDS2TJ103T | 1/4W 10K |
| R811 | ERDS2TJ102T | 1/4W 1K |
| R813 | ERDS2TJ102T | 1/4W 1K |
| R814 | ERDS2TJ103T | 1/4W 10K |
| R815 | ERDS2TJ560T | 1/4W 56 |
| R816 | ERDS2TJ472T | 1/4W 4.7K |
| R817 | ERDS2TJ473T | 1/4W 47K |
| R821 | ERDS2TJ101T | 1/4W 100 |
| R823 | ERDS2TJ472T | 1/4W 4.7K |
| R827 | ERDS1FVJ271T | 1/2W 270 ⚠ |
| R828 | ERDS1FVJ680T | 1/2W 68 ⚠ |
| R829 | ERDS1FVJ820T | 1/2W 82 ⚠ |
| R833, 834 | ERDS2TJ221T | 1/4W 220 |
| R837, 838 | ERDS2TJ474T | 1/4W 470K |
| R839, 840 | ERDS2TJ102T | 1/4W 1K |
| R841 | ERDS2TJ104T | 1/4W 100K |
| R842-844 | ERDS2TJ272T | 1/4W 2.7K |
| R845-848 | ERDS2TJ471T | 1/4W 470 |
| R849 | ERDS2TJ105T | 1/4W 1M |
| R850 | ERDS2TJ182T | 1/4W 1.8K |
| R851, 852 | ERDS2TJ392T | 1/4W 3.9K |
| R853, 854 | ERDS2TJ100T | 1/4W 10 |
| R855, 856 | ERDS2TJ103T | 1/4W 10K |
| R857 | ERDS2TJ471T | 1/4W 470 |
| R858 | ERDS2TJ182T | 1/4W 1.8K |
| R860-864 | ERDS2TJ101T | 1/4W 100 |
| R1301, 1302 | ERDS2TJ102T | 1/4W 1K |
| R1303, 1304 | ERDS2TJ822T | 1/4W 8.2K |
| R1305, 1306 | ERDS2TJ223T | 1/4W 22K |
| R1307, 1308 | ERDS2TJ392T | 1/4W 3.9K |
| R1309, 1310 | ERDS2TJ182T | 1/4W 1.8K |
| R1311, 1312 | ERDS2TJ821T | 1/4W 820 |
| R1313, 1314 | ERDS2TJ333T | 1/4W 33K |
| R1401, 1402 | ERDS2TJ223T | 1/4W 22K |
| R1403, 1404 | ERDS2TJ333T | 1/4W 33K |
| R1405, 1406 | ERDS2TJ122T | 1/4W 1.2K |
| R1407, 1408 | ERDS2TJ333T | 1/4W 33K |
| R1409, 1410 | ERDS2TJ561T | 1/4W 560 |
| R1411, 1412 | ERD25FVJ470T | 1/4W 47 ⚠ |
| R1437 | ERDS2TJ473T | 1/4W 47K |
| R1439 | ERD25FVJ470T | 1/4W 47 ⚠ |
| R1451, 1452 | ERDS2TJ182T | 1/4W 1.8K |
| R1453, 1454 | ERDS2TJ393T | 1/4W 39K |
| R1455, 1456 | ERDS2TJ391T | 1/4W 390 |
| R1457, 1458 | ERDS2TJ823T | 1/4W 82K |
| R1459, 1460 | ERD25FVJ101T | 1/4W 100 ⚠ |
| R1461-1464 | ERDS2TJ223T | 1/4W 22K |
| R1465-1468 | ERD25FVJ101T | 1/4W 100 ⚠ |
| R1469, 1470 | ERD25FVJ821T | 1/4W 820 ⚠ |
| R1471-1474 | ERD25FVJ2R2T | 1/4W 2.2 ⚠ |
| R1501, 1502 | ERDS2TJ362T | 1/4W 3.6K |
| R1509-1512 | RREEMKR10VC | 2W 0.1 |
| R1513-1516 | ERD25FVJ100T | 1/4W 10 ⚠ |
| R1517, 1518 | ERD25FVJ1R0T | 1/4W 1.0 ⚠ |
| R1531, 1532 | ERDS1FVJ100T | 1/2W 10 ⚠ |
| R1707, 1708 | ERD25FVJ6R8T | 1/4W 6.8 ⚠ |
| | | |
| | | CAPACITORS |
| | | |
| C107, 108 | ECBT1H101KB5 | 50V 100P |
| C109, 110 | ECBT1H102KB5 | 50V 1000P |
| C111, 112 | ECEA0JPS330B | 6.3V 33U |
| C115, 116 | ECFR1E223KR | 25V 0.022U |
| C117, 118 | ECFR1E682KR | 25V 6800P |
| C119, 120 | ECEA1HPS010B | 50V 1U |
| C121, 122 | ECBT1E223ZF5 | 25V 0.022U |
| C200 | ECBT1E223ZF5 | 25V 0.022U |
| C201, 202 | ECEA1EK3R3B | 25V 3.3U |
| C203, 204 | ECBT1E223ZF5 | 25V 0.022U |
| C205 | ECBT1H180J5 | 50V 18P |
| C205 | ECEA1CK100B | 16V 10U |
| C206 | ECBT1H180J5 | 50V 18P |
| C207, 208 | ECBT1H151KB5 | 50V 150P |
| C209-216 | ECBT1H101KB5 | 50V 100P |
| C219-230 | ECBT1H101KB5 | 50V 100P |
| C231, 232 | ECBT1E223ZF5 | 25V 0.022U |
| C250 | ECEA1CU470B | 16V 47U |
| C251, 252 | ECEA1HPS3R3B | 50V 3.3U |
| C253, 254 | ECEA1HKR47B | 50V 0.47U |
| C255, 256 | ECBT1H180J5 | 50V 18P |
| C258, 259 | ECBT1E223ZF5 | 25V 0.022U |
| C271, 272 | ECBT1H101KB5 | 50V 100P |
| C273, 274 | ECEA1CK220B | 16V 22U |
| C275, 276 | ECEA1HK010B | 50V 1U |
| C301, 302 | ECEA1HPS3R3B | 50V 3.3U |
| C303 | ECBT1H680J5 | 50V 68P |
| C304 | ECQV1H823JZ3 | 50V 0.082U |
| C305 | ECEA1EK3R3B | 25V 3.3U |
| C306 | ECBT1H221KB5 | 50V 220P |
| C307 | ECEA1EK3R3B | 25V 3.3U |
| C309, 310 | ECBT1H820KB5 | 50V 82P |
| C311, 312 | ECEA1HPS3R3B | 50V 3.3U |
| C313 | ECBT1E103ZF5 | 25V 0.01U |
| C314 | ECBT1E223ZF5 | 25V 0.022U |
| C411, 412 | ECEA1HK3R3B | 50V 3.3U |
| C413, 414 | ECEA1HK2R2B | 50V 2.2U |
| C415, 416 | ECFR1E822KR | 25V 8200P |
| C417, 418 | ECFR1E272KR | 25V 2700P |
| C419, 420 | ECFR1E473KR | 25V 0.047U |
| C421, 422 | ECEA1HK2R2B | 50V 2.2U |
| C423, 424 | ECEA1CPS100B | 16V 10U |
| C425, 426 | ECEA1CK220B | 16V 22U |
| C427 | ECEA0JK470B | 6.3V 47U |
| C432 | ECEA1HK2R2B | 50V 2.2U |
| C433, 434 | ECBT1E223ZF5 | 25V 0.022U |
| C471, 472 | ECEA1HPS3R3B | 50V 3.3U |
| C473, 474 | ECBT1H101KB5 | 50V 100P |
| C475, 476 | ECBT1H821KB5 | 50V 820P |
| C477, 478 | ECBT1H680J5 | 50V 68P |
| C479, 480 | ECEA1HK3R3B | 50V 3.3U |
| C483, 484 | ECBT1E103ZF5 | 25V 0.01U |
| C501, 502 | ECEA0JPX101B | 6.3V 100U |
| C505, 506 | ECEA0JPX101B | 6.3V 100U |
| C507, 508 | ECBT1H270J5 | 50V 27P |
| C509, 510 | ECKR1H223ZF5 | 50V 0.022U |
| C513 | ECEA1CK100B | 16V 10U |
| C514 | ECEA0JK470B | 6.3V 47U |
| C516-518 | ECBT1E103ZF5 | 25V 0.01U |
| C519 | ECEA1HU330B | 50V 33U |
| C520 | ECEA2AU100B | 100V 10U |
| C521 | ECEA1CU101B | 16V 100U |
| C523, 524 | ECQB1H272JZ3 | 50V 2700P |
| C531 | ECBT1E223ZF5 | 25V 0.022U |
| C535, 536 | ECKR1H102ZF5 | 50V 1000P (E, EB) |
| C535, 536 | ECKR1H223ZF5 | 50V 0.022U (EG) |
| C537, 538 | ECBT1H102KB5 | 50V 1000P |
| C539, 540 | ECKR1H102ZF5 | 50V 1000P (E, EB) |
| C539, 540 | ECKR1H223ZF5 | 50V 0.022U (EG) |
| C541, 542 | ECBT1H102KB5 | 50V 1000P |
| C543-546 | ECKR1H102ZF5 | 50V 1000P (EG) |
| C597, 598 | ECBT1H221KB5 | 50V 220P |
| C602 | ECEA1VK3R3B | 35V 3.3U |
| C603 | ECEA0JU470B | 6.3V 47U |
| C604 | ECEA1VK100B | 35V 10U |
| C605 | ECBT1E223ZF5 | 25V 0.022U |
| C606 | ECEA1EK4R7B | 25V 4.7U |
| C607 | ECEA1CK100B | 16V 10U |
| C608 | ECEA0JU102E | 6.3V 1000U |
| C610 | ECBT1E223ZF5 | 25V 0.022U |
| C611 | ECEA1HK010B | 50V 1U |
| C612 | ECQV1H333JZ3 | 50V 0.033U |
| C613 | ECQV1H683JZ3 | 50V 0.068U |
| C614, 615 | ECBT1H101KB5 | 50V 100P |

| Ref. No. | Part No. | Values & Remarks |
|---|---|---|
| C700 | ECKWKC103PF2 | 400V 0.01U ⚠ |
| C701, 702 | ECKR1H103ZF5 | 50V 0.01U |
| C703, 704 | ECEA1EU100B | 25V 10U |
| C705, 706 | ECEA1CK100B | 16V 10U |
| C707 | ECBT1E103ZF5 | 25V 0.01U |
| C708 | ECEA1CK100B | 16V 10U |
| C709 | ECEA1HK2R2B | 50V 2.2U |
| C710 | ECBT1E223ZF5 | 25V 0.022U |
| C711, 712 | ECES1JU682U | 63V 6800U |
| C713 | ECQE2104KF3 | 250V 0.1U |
| C715 | ECEA1VK100B | 35V 10U |
| C716 | ECKR1H103ZF5 | 50V 0.01U |
| C731 | ECFR1E104ZF5 | 25V 0.1U |
| C800, 801 | ECBT1E223ZF5 | 25V 0.022U |
| C802 | ECFR1E104ZF5 | 25V 0.1U |
| C803 | ECEA1CK100B | 16V 10U |
| C804 | ECFR1E104ZF5 | 25V 0.1U |
| C805 | ECBT1H102KB5 | 50V 1000P |
| C806 | ECFR1E104ZF5 | 25V 0.1U |
| C807 | ECEA1CK100B | 16V 10U |
| C808 | ECEA1HK010B | 50V 1U |
| C809 | ECQV1H104JZ3 | 50V 0.1U |
| C810 | ECBT1H220J5 | 50V 22P |
| C811 | ECEA0JK101B | 6.3V 100U |
| C814 | ECEA0JK101B | 6.3V 100U |
| C815 | ECEA1CK100B | 16V 10U |
| C816 | ECBT1H102KB5 | 50V 1000P |
| C818 | ECEA1EK4R7B | 25V 4.7U |
| C819, 820 | ECEA0JK101B | 6.3V 100U |
| C821 | ECBT1E223ZF5 | 25V 0.022U |
| C822 | ECEA1EK100B | 25V 10U |
| C823 | ECBT1H102KB5 | 50V 1000P |
| C825, 826 | ECEA1EN100SB | 25V 10U |
| C827, 828 | ECBT1C103NS5 | 16V 0.01U |
| C829, 830 | ECBT1H102KB5 | 50V 1000P |
| C831 | ECBT1E223ZF5 | 25V 0.022U |
| C833 | ECQV1H104JZ3 | 50V 0.1U |
| C834 | ECBT1H102KB5 | 50V 1000P |
| C835 | ECBT1E223ZF5 | 25V 0.022U |
| C836-838 | ECEA1EK4R7B | 25V 4.7U |
| C839, 840 | ECBT1H331KB5 | 50V 330P |
| C843 | ECBT1H220J5 | 50V 22P |
| C844 | ECBT1H102KB5 | 50V 1000P |
| C1301, 1302 | ECFR1E123KR | 25V 0.012U |
| C1303, 1304 | ECFR1E683KR | 25V 0.068U |
| C1305, 1306 | ECFR1E472KR | 25V 4700P |
| C1307, 1308 | ECFR1E223KR | 25V 0.022U |
| C1309, 1310 | ECEA1HPS010B | 50V 1U |
| C1401, 1402 | ECEA1HPX3R3B | 50V 3.3U |
| C1403, 1404 | ECBT1H680J5 | 50V 68P |
| C1405, 1406 | ECEA1CPX220B | 16V 22U |
| C1407, 1408 | ECBT1H820KB5 | 50V 82P |

| Ref. No. | Part No. | Values & Remarks |
|---|---|---|
| C1409, 1410 | ECBT1H270J5 | 50V 27P |
| C1411, 1412 | ECBT1H681KB5 | 50V 680P |
| C1413, 1414 | ECCR2H070D5 | 500V 7P |
| C1415-1417 | ECBT1H102KB5 | 50V 1000P |
| C1427 | ECKR1H223ZF5 | 50V 0.022U |
| C1428 | ECBT1E223ZF5 | 25V 0.022U |
| C1429 | ECEA1JU220B | 63V 22U |
| C1451, 1452 | ECKR1H333ZF5 | 50V 0.033U |
| C1453-1456 | ECCR2H680K5 | 500V 68P |
| C1457-1460 | ECEA1HK010B | 50V 1U |
| C1513, 1514 | ECKR1H223ZF5 | 50V 0.022U |
| C1707, 1708 | ECEA1JU220B | 63V 22U |



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